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**"Advancing Research
In Challenging Times"**

ABSTRACTS

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ORAL PRESENTATIONS

MEDICINE AND ALLIED

M4: Knowledge of Complications of Diabetes Mellitus (DM) And Associated Factors Among Patients with Type 2DM Visiting Public and Private Diabetic Clinics in Peshawar: A Descriptive Study. Arshad Hussain, Faran Younas, Sundas. Northwest General Hospital & Research Centre.

Objective: This study aimed to determine the knowledge of diabetic complications and associated factors among patients with type 2 DM visiting Public and Private Diabetic Clinics in Peshawar. **Study Design:** Cross sectional. **Materials and Methods:** A cross sectional study was carried out among 100 individuals with T2DM who visited the outpatient department of Khyber teaching hospital and Northwest general hospital Peshawar Pakistan. Patients were included using Convenience sampling. A close ended questionnaire was used to obtain information such as socio-demographic and knowledge on complications of diabetes. **Results:** Of the total 100 patients, 59(59%) were females. Their ages ranged from 25 to 80 years with mean age of 54.14(SD=13.56) years. The mean duration of DM was 10.88 (SD=6.84) years. Regarding complications 27.1% had poor knowledge, 49.4% had average knowledge 23.5% had good level of knowledge. There was no significant difference in level of knowledge regarding diabetic complications among male and female ($p=0.908$), private and government sector hospitals ($p=0.261$), rural and urban residents ($p=0.285$) whereas there was statistically significant difference knowledge regarding complication and levels of qualifications ($p<0.001$). Similarly, risk factors associated with the level of knowledge of diabetic complications, 58% had poor knowledge 42% had good knowledge. There was no difference in level of knowledge regarding risk factors associated diabetic

complications and gender ($p=0.748$), private and government sector hospitals ($p=0.685$), residence ($p=0.746$) except qualification ($p<0.001$). **Conclusion:** Nearly half of the patients demonstrated average knowledge. Overall, most of the patients are unaware of diabetic complications and risk factors. Education was a significant factor; male also have slightly better knowledge than females. Community and hospital-based awareness programs should be launched to improve the level of knowledge towards complications and associated risk factors. **Keywords:** Diabetes, patients, knowledge of complications, risk factors.

M7: To Audit Management Of Acute Upper Gastrointestinal Bleeding In Acute Medical Unit Oflady Reading Hospital, Peshawar. Aima Yousaf. Lady Reading Hospital.

Objective: To audit the management of acute upper gastrointestinal bleeding of patients admitted in acute medical unit of Lady Reading hospital following guidelines of British Society of gastroenterology. To standardize the management of acute upper gastrointestinal bleeding. To improve clinical outcomes of patients presenting with acute upper gastrointestinal bleeding. **Study Design:** A clinical Audit. **Materials and Methods:** The retrospective secondary-data study was conducted at Acute Medical Unit, Lady Reading Hospital, Peshawar, Pakistan from April 2022 to July 2022. Data was analysed using SPSS 2.0. **Results:** Out of 28 patients, 23 (82.1%) were male and 5 (17.9%) were female. The overall mean age was 58.75 ± 18.39 years (range: 17-95 years). Out of 28, variceal bleed was the cause in 17 (60.7%), and non-variceal in 11 (39.3%). Out of 17 patients with variceal bleed, 15 (88.2%) received Terlipressin, 14 (82.4%) antibiotics and 15 (88.2%) received proton pump inhibitors respectively. Similarly, out of 11 patients with non-variceal bleed, 4 (36.4%) received Terlipressin, 10 (90.9%) received antibiotics, and 10 (90.9%) received proton pump inhibitors respectively. Glasgow-

Blatchford score was not calculated in any patient. **Conclusion:** Out of 28 patients, 23 (82.1%) were male and 5 (17.9%) were female. The overall mean age was 58.75 ± 18.39 years (range: 17-95 years). Out of 28, variceal bleed was the cause in 17 (60.7%), and non-variceal in 11 (39.3%). Out of 17 patients with variceal bleed, 15 (88.2%) received Terlipressin, 14 (82.4%) antibiotics and 15(88.2%) received proton pump inhibitors respectively. Similarly, out of 11 patients with non-variceal bleed, 4 (36.4%) received Terlipressin, 10 (90.9%) received antibiotics, and 10 (90.9%) received proton pump inhibitors respectively. Glasgow-Blatchford score was not calculated in any patient. **Keywords:** AUGIB, BSGE, Terlipressin.

M8: S. Typhi Super Bug and Its Antibiotic Sensitivity A Prospective Study.

Ahmad Zuhayr. Hayatabad Medical Complex.

Objective: To determine the sensitivity patterns of Salmonella Typhosa and recommend the appropriate empirical antibiotics for it while awaiting culture results. **Study Design:** Prospective study. **Materials and Methods:** This Prospective study was conducted in Medical Unit of Hayatabad Medical Complex, Peshawar, Pakistan from June 2021 to Aug 2022. A total of 369 Blood cultures were performed. Blood culture was done using conventional microbiological techniques. Biochemical techniques were used to identify the organisms and antibiotic sensitivity was determined by Kirby Bauer method. **Results:** Out of 369 blood cultures, 246 grew S.Typhi. The gender distribution in cases of Typhoid fever was 144 (58.4%) females as compared to 102 (41.60 %) males, with an age range of 15 -75 years. Blood culture of 246 (100%) patients were sensitive to Meropenem, 246 (100%) to imipenem, 246 (100%) to Polymyxin, 242 (98.60%) to Gentamycin, 239(98.4%) to Amikacin, 150 (61.20%) to Ciprofloxacin, 125 (51.20%) to azithromycin,

64 (26.40%) to Ceftriaxone, , 32(13.00%) to cefoperazone-sulbactam , 30(12.00%) to Cefotaxime and 24(10.00%) to Co-Amoxiclav.

Conclusion: S.Typhi resistance against most commonly used antibiotics is on the rise and we recommend using Carbapenems and aminoglycosides as initial empirical antibiotics of choice in admitted patients with strong suspicion of typhoid fever.

Keywords: Salmonella Typhosa.

M9: Characteristics and outcome of pregnant women admitted to COVID ward of a tertiary care hospital.

Mohamed Asim, Khatira Wahid. Northwest General hospital and research Centre.

Objective: To find out the characteristics and outcome of pregnant women admitted with SARS-CoV-2infection.

Study Design: Retrospective cohort study.

Materials and Methods: All patients admitted in COVID ward from April 2020 to August 2022 were analysed and 27patients selected that were pregnant and SARS-CoV-2 infection. Demographics and baseline characteristics including age, gestational age, diabetes, hypertension etc were collected. The clinical presentation, oxygen requirement, respiratory support requirement, treatment received and outcome was analysed. **Results:** Out of total of 1454 patients admitted to COVID ward from April 2020 to August 2022, 27 were pregnant patients The mean age of these patients was 27.40 (range 25 - 38 years. All patients were in 3rd trimester with a mean gestational period of 31 weeks. Among these 4 had diabetes. 9 (33%) of pregnant women presented with Covid 19 related symptoms. Out of these 9 patients, 6 were in respiratory failure requiring oxygen out of which 5 were on non-invasive ventilation. 3 of the patients escalated to mechanical ventilator and died. The mortality rate was 33% in symptomatic patients and 11.1% overall. **Conclusion:** Pregnant women especially those in 3rd trimester are at increased risk of severe

illness with SARS-CoV-2 infection. Furthermore, they have worse clinical course and outcome. **Keywords:** SARS-COV-2, pregnant, tocilizumab.

M 10: Anxiety prevalence and its risk factors among undergraduate students. Comparing medical with non-medical.
Bilal Saeed. CMH Peshawar.

Objective: To assess the prevalence of anxiety, determine various factors associated anxiety among undergraduate students. **Study Design:** Descriptive cross-sectional study. **Materials and Methods:** done at different Institutions of Abbottabad from December 2016 to August 2017. Samples of 137 students selected by using non-probability convenient sampling technique, and were included in our study. A self-administered questionnaire was used as a tool for data collection which was analysed using SPSS-21.0. **Results:** Out of 137 undergraduate students, 31(22.6%) were males and 106(77.4%) were females, 62(45%) students were boarders and 75(55%) were day scholars, mean age was 20.80 ± 1.5 years. 42(30.7%) were normal, 27(19.7%) were suffering from mild anxiety, 48(35.0%) from moderate anxiety while 20(14.6%) students from severe anxiety. Among normal students 11(8.0%) were male and 31 (22.6%) were female. In mild anxiety 6(4.4%) were male and 21(15.3%) were female, 11 (8.0%) males and 37(27.0%) females were suffering from moderate anxiety while in severe anxiety 3(2.2%) were males and 17(12.4%) were female. It is clearly showing that anxiety is more prevalent among females than males. Other Demographics showed that 51 were feeling home sickness, 12 students were cigarette smokers. 54 students were using self-medication during exam, 37 students in the sample faced financial difficulties and 106 students had chosen career of their own choice while others didn't. **Conclusion:** Our study concludes that anxiety is highly prevalent in undergraduate students.

Moreover, prevalence of anxiety was high among female students compare to males, in day scholars and medical students as compared to students of other fields. **Keywords:** Anxiety, Students.

M 13: Quality Improvement Programme On Venous Thromboembolism Risk Stratification And prophylaxis In Patients Of Medical Ward, North West Teaching Hospital Peshawar, Pakistan
Muhammad Haris Shah, Southwest Acute Hospital Enniskillen, Medicine. Mahnoor Khattak, Nwgh.

Objective: To highlight the importance of VTE risk stratification and its documentation for all patients presenting to the medical ward followed by prescription of chemical VTE prophylaxis as per standard dose when indicated, thus reducing health and financial burden. **Study Design:** A Performa was developed with indicators including medical record number, gender, date & time of admission, assessment of VTE prophylaxis in clinical notes, Indication of VTE prophylaxis, contraindication to prophylaxis, prophylaxis prescription, standard drug /dose if prescribed. **Materials and Methods:** During first cycle, a Performa was developed and distributed among the medical team to assess the current practice. 60 Patients clinical notes were reviewed prospectively from 01.09.2021 to 30.09.2021. In second cycle, we developed a data sheet and documentation in VTE proforma was made compulsory for the medical team. 90 patients data was re-audited from 01.01.2022 to 30.01.2022. **Results:** First cycle, 30 (50%) patients had a clinical indication for VTE prophylaxis out of which 3(10%) patients had a contraindication. Thus 27 (90%) out of 30 were candidates of VTE prophylaxis, that only 6 (20.2%) patients received. Second cycle, 24 patients (26.67%) had a clinical indication for VTE prophylaxis whereas 3 (12.5%) patients had a contraindication. Thus 21 (87.50%) patients out of 24 needed prophylaxis which 18 (75%) patients

received. **Conclusion:** By implementation of standard practice, prophylaxis prescription to the eligible candidates improved from 32.22% to 87.5%. **Keywords:** VTE (Venous thromboembolism), NICE.

M 14: Comparison of the performance of Tubex® TF, Widal immunodiagnostic assay and blood culture in diagnosis of enteric fever in a private tertiary care hospital Peshawar, Pakistan.

Sameed Ullah Qureshi, Northwest General Hospital and Research Center.

Objective: To determine and compare the performance of TUBEX®TF, Widal test and blood culture in the diagnosis of enteric fever. **Study Design:** Retrospective Cohort study **Materials and Methods:** The retrospective study was conducted at the Northwest General Hospital and Research Centre, Hayatabad, Peshawar, Pakistan, and comprised medical record from January to December 2018 related to patients who presented with fever. Typhidot, Widal test and blood culture had been performed as part of evaluation. Data was analysed using SPSS 16. **Results:** Of the 241 patients, 68(28.21%) tested positive for salmonella in blood culture. Among them, TUBEX®TF was positive in 29(42.64%) and Widal was positive in 25(36.76%). TUBEX®TF had positive predictive value 33.33%, negative predictive value 71.77%, sensitivity 42.65% and specificity 62.34%. The corresponding values for Widal were 24.51%, 69.06%, 36.76% and 55.49%. **Conclusion:** Sensitivity, specificity, positive predictive value and negative predictive value of TUBEX®TF and Widal test were very low compared to blood culture. **Keywords:** Enteric fever, TUBEX®TF, Widal, Blood culture.

M 16: Spontaneous bacterial peritonitis revisited in Khyber Teaching Hospital for the causative agents.

Najeeb Ullah, Khyber Teaching Hospital Peshawar.

Objective: To see the bacterial yield of ascitic

fluid cultures in patients with cirrhosis liver with clinical suspicion of spontaneous bacterial peritonitis. To ascertain the most common organism causing spontaneous bacterial peritonitis. **Study Design:** Cross – sectional. **Materials and Methods:** This study was conducted in the department of medicine Khyber Teaching Hospital Peshawar from July 2020 to June 2021. Fifty patients with liver cirrhosis were included in the study that were suspected of having spontaneous bacterial peritonitis. Apart from the baseline tests, diagnostic paracentesis was performed on all of them upon admission before starting them on antibiotics. Ascitic fluid (10 ml) was inoculated in culture bottles followed by Sub cultures, identification of bacteria and antibiotic sensitivity. **Results:** Out of the 50 patients 20 were Hepatitis B surface antigen (HBs Ag) positive, 28 were positive for anti-hepatitis C antibodies and two were positive for both. Twenty-nine cases were found to have bacterial peritonitis. 19 were anti-HCV positive, 8 were HBsAg positive and two were having both. Patients were divided into three groups. 11 cases were of classical SBP, 16(55.17%) were of Culture Negative Neutrocytic Ascites and two were from the bacterascites group. Cultures were positive in 13 patients. Escherichia coli was the commonest organism isolated, streptococcus in two cases and one each was Staphylococcus, Klebsiella and actinobacter. **Conclusion:** Spontaneous bacterial peritonitis is a common complication of cirrhosis liver with ascites. It is easily overlooked and needs high index of suspicion for the diagnosis. Ascitic fluid culture is the best method for diagnosing SBP but is positive in less than half of cases. **Keywords:** Spontaneous bacterial peritonitis, cirrhosis liver, ascitic fluid cultures.

M28: The diagnostic accuracy of HPYLORI culture and rapid urease test in the diagnosis of hpylori infection keeping histopathology as gold standard.

Momena Shah. Khyber Medical College, Peshawar.

Objective: The aim of this study was to determine diagnostic efficacy of biopsy based tests in detection of *Helicobacter pylori* infections. **Study Design:** Cross Sectional Study **Methods:** This validation study cross sectional study was conducted from January 2019 to August 2019 at Khyber medical college, pathology department, Peshawar and comprised of biopsy samples of 87 patients obtained via endoscopy which was done at gastrointestinal endoscopy department, Hayatabad medical complex (HMC). Patients with history of prior antibiotics and PPIs were excluded from the study. **Results:** Out of 87 patients, 57.47% (50/87) were male and 42.52% (37/87) were female patients with age range of 18 -80 years and a mean age of 45 years. Endoscopic findings shown 64.36% (56/87) of patients with gastritis, duodenitis with 6.89% (6/87), peptic and duodenal ulcers with 22.98% (20/87), erosion with 4.59%(4/87) and adenocarcinoma of stomach with 2.29% (2/87). The sensitivity and specificity of culture versus histopathology was 45.45% and 90.7% respectively, while positive and negative predictive values were 62.5% and 83% respectively. The sensitivity and specificity of RUT versus histopathology was 81.81% and 90% while positive and negative predictive values were 90% and 94% respectively. **Conclusion:** The sensitivity and specificity of rapid urease test and histopathology are high as compared to bacterial culture as shown in our study. **Key Words:** *Helicobacter Pylori*, Gastritis, Rapid urease test, Adenocarcinoma.

PEDIATRICS

P3: Playing SAFE at North West Neonatal intensive care. Does it impact Clinical Care?

Bilal Sethi, Asif Saleem, Saima Noreen, Furqan Ahmad, Dawood Tahir. Northwest General Hospital, Peshawar.

Objective: To propose and adopt an easy-to-use diagnosing modality, POCUS (point of care ultrasound) for specific clinical investigation and to screen and evaluate a suddenly deteriorating infant in emergencies, for the most common life-threatening complications like, sudden moderate to severe respiratory distress using SAFE protocol. **Study Design:** Prospective study. **Materials and Methods:** Ventilated and non-ventilated neonates were inducted in study from 1st June to 31st August 2022. For non-ventilated who developed respiratory distress in a neonatal unit categorized as severe respiratory distress (respiratory rate more than 60bpm, capillary perfusion >4, tachycardia, and requiring > 40% oxygen) or Ventilated neonates presenting with sudden deterioration (sudden dropping of saturation 90% of FiO2) were screened by POCUS, adopting SAFE protocol which included ultrasound of heart, lung and brain at specific points. 59 newborns were evaluated. It started with targeted ultrasound of lung to look for lung sliding, then for A lines and B lines. Once the lung conditions like pneumothorax, pleural effusion and hyaline membrane disease were ruled out, the heart was evaluated for tamponade, hypovolemia and acute critical aortic occlusion and finally cranial ultrasound to look for intraventricular bleed. All findings on POCUS were further evaluated and diagnosis was confirmed by specific investigation which include CXR or Echo or cranial ultrasound by radiologist. **Results:** Sudden deterioration on ventilator or sudden respiratory distress is a fairly common presentation in a neonatal unit. We evaluated 59 of our newborns as per SAFE. 5% (n-3) had pneumothorax, 5% (n-3) had severe intraventricular hemorrhage, 5% (n-3) had cyanotic congenital heart, 6.7%(n-4) had severe pulmonary hypertension, 11.86% (n-07) had Hyaline Membrane Disease, 18.6% (n-11) had transient tachypnea of new born, (22%) (n-13) had pneumonia and remaining had severe neonatal sepsis 25.4% (n-15) where no clinical cause found. All Lung

findings were further confirmed by x-ray. This correlation was up to 88% accurate specially in case of the Lung ultrasound (LUS). 100% positive correlation in case of pneumothorax, intraventricular hemorrhage, severe pulmonary hypertension, and Pneumonia. While correlation was 70% in Hyaline membrane disease. For septic patient's diagnosis was further confirmed on basis of raised PCT. Congenital cyanotic heart disease was further done by expert echocardiographer.

Conclusion: This simplified and rapid approach using step by step SAFE protocol for the neonatologist relies on simple ultrasound signs that need little experience to use. It provides critical information within minutes so neonatologist can act quickly esp. in case of emergencies. It saves time and also helps in early and correct diagnosis in any case of sudden respiratory distress. It can easily save life and help improve clinical care by following the clinical algorithm of SAFE. In future, it may also help in cutting the cost of doing, so many investigations and give direction to the caring neonatologist to request specific investigation as directed by POCUS finding. It will also decrease radiation exposure for the neonate post chest intubations. It is a major step towards improving the quality of care in the NICU.

Keywords: POCUS, SAFE-R protocol, Lung ultrasound LUS, pneumothorax, pulmonary hypertension newborn

P4: Frequency Asymptomatic Hypocalcemia among Neonates of Diabetic mother admitted in a Tertiary care Hospital Nursery. Sohail Akhtar, Northwest general hospital, Peshawar.

Objective: To find the frequency of asymptomatic hypocalcemia among neonates of diabetic mother. **Study Design:** cross sectional study. **Materials and Methods:** This cross-sectional study was conducted at the Neonatology Unit department of Pediatrics, Northwest General hospital Peshawar, Pakistan from 1st January

2018 to 20th November 2020. Data of total of 117 neonates of diabetic mother admitted in nursery that had a serum calcium level measured on presentation was collected and analyzed using SPSS version 21. **Results:** The mean age was 2.87 ± 1.2 days, with a range of 1 to 28 days. Age-wise distribution among 117 neonates in which 1-5 days were 21 (17.9%), 6-10 days were 29 (24.8%), 11-15 days were 22 (18.8%), 16-20 days were 34 (29.1%) and 21-28 days 11 (9.4%). Gender-wise distribution among 117, male babies were 62 (52.9%) and female babies were 55 (47.0%). Distribution of hypocalcemia among 117 neonates was analyzed and low level was found in 81 babies (69.2%), Normal level was found in 34 babies (29.0%) and high level was found in 2 babies (2.0%). There was significant association between hypocalcemia with gender showing P value of (.006) but no significant association was found with age-wise distribution showing P-value (.861) respectively. **Conclusion:** According to our findings, neonatal asymptomatic hypocalcemia especially early-onset, is common and should be evaluated and investigated among neonates born to diabetic mother. **Keywords:** Neonates, Hypocalcemia, Diabetic mother.

P7: Condition at Arrival and Outcome of Neonates Arriving at Northwest General Hospital NICU through Emergency Room: Zango versus Other Transport Means. Saima Noreen, Northwest General Hospital Peshawar.

Objective: To compare the condition at arrival and outcome of sick neonates transported via Zango (Northwest neonatal emergency transport service) to Northwest general hospital ER with those transported through other means. **Study Design:** Comparative cross-sectional study. **Materials and Methods:** This comparative cross-sectional study included 135 neonates who were admitted in other hospitals and were transported to Northwest General Hospital located in Hayatabad Peshawar and admitted

through emergency room in 8months I-e from 1st January 2022 to 31st Aug 2022. Transport details and clinical features at arrival were recorded. All neonates were followed up till discharge or death. Transport and clinical variables were correlated with outcome. All neonates who came from home to ER were excluded. **Results:** Neonatal sepsis, birth asphyxia and prematurity were the major indications for transport. 46.7% were transported through private vehicles, 47.4% via private ambulance and only 5.9% (8 in number) were transported by Northwest Neonatal emergency transport service, Zango. In other transportation means, 40.9% presented with hypothermia, 28.4% with hypoglycemia, 33.7% with severe distress, 15.7% with cyanosis, 24.2% with grunting, 5.5%with gasping, 54.4% with poor perfusion, 11.75% fits, 9.45% with fever, 14.2% with dehydration, only 12.7% were well.19% of neonates died and among them 79.1% came with poor perfusion, 70.8% with hypothermia, 58.3% severe distress, 50% with cyanosis, 37.5% with hypoglycemia, 37.5% grunting, 25% with gasping, 16.6% with dehydration,8.3%% with fever and 4.1% with fits. In Zango transported neonates, 1 neonate expired who had severe pulmonary arterial hypertension. On arrival to ER, all neonates transported via Zango were well with 0% hypothermia, 0%hypoglycemia, 0% severe distress, 12.5% cyanosis (1 with cyanotic congenital heart disease), 0% grunting, 0% gasping,0% poor perfusion, 0% fits, 0% with fever, 0% dehydration. **Conclusion:** Stabilization prior to transport is essential. Poor perfusion, Hypothermia, severe distress, cyanosis, hypoglycemia, grunting, gasping, dehydration, fever and fits should be prevented in neonates during transport as they adversely affect the outcome. Hospital to hospital transport of sick neonate should be done through neonatal transport services. **Keywords:** Neonatal transport, Zango, ambulance, hypothermia, mortality.

P8: The Role of Intensive Phototherapy

(Billy 360) In Decreasing the Need Of Exchange transfusions In Northwest General Hospital.

Furqan Ahmad, Northwest general Hospital Peshawar.

Objective: To assess the efficacy of Intensive phototherapy (Billy 360) in decreasing the need of exchange transfusion at North west General Hospital. **Study Design:** Prospective study. **Materials and Methods:** This prospective study was conducted at Neonatal unit, Northwest general hospital from January 2022 till 31st August, 2022. It comprised of 68 newborns with Hyperbilirubinemia .11 of these 68 newborns (16.1%) fell in exchange transfusion range when plotted on neonatal hyperbilirubinemia treatment threshold graphs but were treated with billy 360.2/11 patients (18.1%) still needed exchange transfusion due to high bilirubin levels. For patients who were treated with billy 360 serum bilirubin was repeated after 4 hours and at 12 hours. All the patients were subjected to complete clinical evaluation and laboratory investigations. **Results:** Out of total 68 neonates admitted with hyperbilirubinemia 57 (83.82%) were treated with phototherapy and 11(16.17%) were treated with billy 360.Billy 360 decreased the need for exchange transfusion in 9 neonates out of total 11neonates (81.8%) who were in exchange transfusion range when plotted on neonatal hyperbilirubinemia treatment threshold graphs. **Conclusion:** In treatment of neonatal hyperbilirubinemia Billy 360 is an effective and non-invasive tool to reduce serum bilirubin level in patients who are in exchange transfusion range. **Keywords:** Intensive phototherapy, Exchange transfusion, Neonatal jaundice

P10: Response to iron supplementation therapy among children presenting with breath-holding spells.

Sadia Jehanzeb, Northwest General Hospital, Peshawar.

Objective: To determine the response to iron supplementation therapy among children presenting with breath-holding spells regardless of iron status. **Study Design:** Descriptive Study. **Materials and Methods:** First of all, children presenting with the characteristic history of breath holding spells were selected. The history was taken from child's parent. Iron supplementation was prescribed to these children regardless of their iron status. Parents were instructed to follow up at 4 weeks then 8 weeks and finally at 2 months after completion of iron supplementation therapy. The final outcome was measured at 2 months after completion of iron supplementation therapy. History was taken from the parent to find out the child's breath-holding spell frequency during the 2 months after completion of iron supplementation therapy. Then response of each child to iron supplementation was classified as complete response, partial response or no response based on complete resolution, 50 percent reduction or no reduction in breath-holding spell frequency respectively. Data obtained from the child's parent was recorded in a pre-designed proforma. **Results:** Mean and SDs for age was 1.5±1.15. 150 (63.29%) patients were in 6 months to 2 years while 87 (36.70%) patients were in 3 to 4 years age group. (Table No. 2). 169 (71.30%) patients were male while 68 (28.69%) patients were female. As per response to iron supplementation, 35 (14.76%) patients had partial response, 163 (68.77%) patients had complete response and 39 (16.45%) patients experienced no response to iron supplementation. **Conclusion:** I have concluded that iron supplementation is effective in the management of breath holding spells. Non anemic and iron-replete children with breath holding spells also respond well to iron supplementation. **Keywords:** Breath-holding spell; iron deficiency; electroencephalography.

OBS/GYNAE

Ob/Gyn 12: COVID-19 and pregnancy, responding to rapidly evolving situation. Comparative analyses of maternal and fetal complications in Covid-19 with non-pandemic.

Saadia Shamsher. HMC.

Objective: The pandemic caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has exposed vulnerable populations of pregnant ladies to an unprecedented global health crisis. The objective of this study was to summarize the clinical manifestations and maternal and perinatal outcomes during pregnancy, in pandemic COVID-19 and compare with non-pandemic, in 2019. **Study Design:** A comparative analyses of the two groups was performed with the chi square test, and P value was calculated for significance between the two groups. **Materials and Methods:** A total of 2169 pregnant women in the third trimester of their pregnancies who gave birth from May 2020 to August 2020 were selected as observation group (during pandemic COVID-19), while 1812 pregnant ladies who gave birth from May 2019 to Aug 2019 as a control group (during non-pandemic). A comparative analyses of the two groups was performed with the chi square test, and P value was calculated for significance between the two groups. **Results:** The difference in the overall rate of maternal complications and fetal outcome was not statistically significant. Among the maternal complications post term pregnancy and preterm delivery ($P < 0.05$) is significantly more in observed group than the control group. Furthermore, we found that among fetal outcome birth asphyxia was significantly more in the observed group than the control group. **Conclusion:** The results may provide useful information to management practices regarding pregnancy and child birth after lockdown, enabling better control of preterm delivery and post term pregnancy and as well as birth asphyxia. In COVID-19 pandemic and the antenatal care provision this comparative analysis of maternal and fetal

complications is showing an excellent management plan despite of strongly applications of pandemic SOPs, as there is no significant difference in both groups.

Keywords: Antenatal care, maternal complications, covid_19, fetal complication

Obs/Gyn 8: Outcome of pregnancy in Covid-19 positive women presenting to Northwest General Hospital and Research Centre, Peshawar.

Dr Khushbakht Hussam, NWGH, Peshawar.

Objective: To find out the outcome of pregnancy in Covid-19 positive patients presenting to Northwest General Hospital and Research Centre, Peshawar. **Study**

Design: Retrospective cohort study Graphic attachments (i.e., tables, illustrations and pictures): **Materials and Methods:** This study was conducted in the department of obstetrics and gynecology in Northwest General Hospital and Research Centre, Peshawar from April, 2020 to April, 2022

Results: The data was collected from 50 pregnant females. The mean maternal age was 32.45 ± 4.56 years and mean gestational age was 37.1 ± 2.45 weeks. There were 12 patients who were suffering from hypertensive disorder, 13 from DM and 4 from asthma. Mean BMI was 34.12 ± 4.23 kg/m². Table 01: Baseline values for selected pregnant women Maternal age (years) 32.45 ± 4.56 Gestational age at delivery (weeks) 37.1 ± 2.45 Hypertensive disorders 12 Diabetes 13 Asthma 4 BMI (kg/m²) 34.12 ± 4.23 There data was further classified into symptomatic (25 patients) and a-symptomatic (25 patients). From these symptomatic patients there were 18 miscarriages occur, 3 with hydrops fetalis and 3 with Premature rupture of membranes (PROM). There were 1 patient who died due to pneumonia in 3rd trimester. Table 02: Classification of patients Variables N = 25 Miscarriages 18 Hydrops fetalis 03 PROM 03 Maternal and neonatal death 1 **Conclusion:** It is concluded that Covid-19 affects every trimester of pregnancy therefore its

presence is of significant concern for both patients and the caregivers. **Keywords:** Hypertensive disorder, Asthma, Pregnancy, Cellular immunity, Hydroxychloroquine.

Ob/Gyn7: Mirena (LNG - IUS) for Abnormal Uterine Bleeding A useful tool in the Covid times.

Jamila M. Naib. Khyber Teaching Hospital, Peshawar

Objective: 1. To evaluate satisfaction and improvement in quality of life among women with heavy menstrual bleeding, treated with LNG – IUS. 2. To determine in improvement in Hb levels after one year of use of LNG -IUS.

Study Design: Prospective interventional study. **Materials and Methods:** This study included 73 women of reproductive age 20 – 25 years' age complaining of heavy menstrual bleeding who presented to Gynae OPD KTH. Patients with fibroids more than 3 cm, pelvic inflammatory disease, bleeding of unknown cause and any known pelvic malignancy were excluded. Mirena was inserted in OPD routinely and in OT under anesthesia where cervix could not be dilated. Patients were followed up in OPD at six months and one year. Improvement in symptoms, quality of life, Hb before and after the procedure were documented on a proforma. **Results:** There was a statistically significant resolution in amount of bleeding and improvement in Hb. Satisfaction rate was 92%. There was improvement in Hb 97% patients. Only 04 out of 73 patients needed hysterectomy. **Conclusion:** Mirena is an effective and well - tolerated treatment option for abnormal uterine bleeding. In the Covid times, it proved to be an effective first line management of AUB. We recommend its used after careful selection of patients and also recommend a good counselling session before its use. **Keywords:** Abnormal uterine bleeding, heavy menstrual bleeding, LNG – IUS.

Ob/Gyn 14: Relationship of serum prostate specific antigen with hirsutism in women

having polycystic ovary syndrome belonging to the province of Khyber Pakhtunkhwa, Pakistan

Naheed Khattak, Khyber Medical College, Peshawar.

Objective: To evaluate serum PSA, testosterone and DHEAS levels and determine the status of hirsutism in PCOS females of Khyber Pakhtunkhwa. To find relationship of serum PSA with hirsutism in the study subjects. **Methods:** A total of 172 study subjects were involved in this comparative/ descriptive study having a cross sectional design. It was conducted in Khyber Teaching Hospital, Lady Reading Hospital, and Hayatabad Medical Complex, the three tertiary level hospitals of Khyber Pakhtunkhwa. PSA levels, testosterone and DHEAS levels of 86 newly diagnosed cases of PCOS (Group A) were compared with 86 healthy age matched controls (Group B). These parameters were estimated using ELIZA method. Distribution of hirsutism of the study subjects was also established. SPSS version 21 was used to analyze the data. The variables were compared using independent student's t test. Relationship of serum PSA with other variables was established using Pearson's correlation co-efficient. **Results:** The results showed that serum PSA was significantly raised (0.325 ± 0.243 Vs 0.119 ± 0.209 , $P < 0.0001$) in females with PCOS. Serum total testosterone (1.639 ± 0.773 vs. 0.739 ± 0.965 , $P < 0.0001$) and DHEAS (3.397 ± 1.243 Vs 2.035 ± 1.203 , $P < 0.0001$) levels were also raised. Moreover, 75 out of 86 cases (87%) presented with hirsutism. A highly significant positive relationship was seen between PSA with testosterone (r 0.352, P 0.000) and DHEAS levels (r 0.432, P 0.000). **Conclusion:** This study observed raised levels of serum PSA, testosterone and DHEAS in females having polycystic ovary syndrome. Moreover, PSA levels showed positive relationship with hirsutism as well as serum testosterone and DHEAS. **Key words:** Prostate Specific Antigen, Hirsutism, Polycystic Ovary Syndrome.

Ob/Gyn2: Covid-19 During Pregnancy: A Perspective of Maternal and Fetal Outcomes
Romana Bibi. Postgraduate Resident.

Objective: To determine the frequency of maternal and neonatal complications in covid-19 affected pregnant women. **Study Design:** A descriptive study was done. **Materials and Methods:** Pregnant patients with positive PCR (reverse transcriptase-polymerase chain reaction) report consecutively presented to Hayatabad Medical Complex were admitted to the department of obstetrics and gynaecology from November 2020 to July 2021. 50 pregnant women with covid-19 positive PCR results were assessed. A descriptive study was done. **Results:** Mean age of the patients was 47 ± 5 years and mean gestational age were 36 ± 7 weeks. Maternal complications of COVID-19 include preterm labour (6%), maternal mortality (2%), premature rupture of membranes (PROM) (3%) and oligohydramnios (7%). As a finding of routine COVID-PCR testing 52% (26) and 44% (22) patients were asymptomatic and mild symptomatic respectively while 4% (2) were having severe symptoms. Fetal complications of COVID-19 include still birth (6%), intrauterine growth restriction (IUGR; 3%), and preterm birth (6%), fetal distress (5%) and median Apgar score of 5+2 All the neonates were covid negative in the first two days except one. **Conclusion:** Pregnant women who test positive for COVID-19 have less symptoms than the normal population and may still test negative for viral pneumonia on RT-PCR. Preterm deliveries, low birth weight, C-sections and NICU admissions appear to be more common than in the general population. **Keywords:** PROM, IUD, maternal mortality, Preterm labour, Oligohydramnios

STUDENT'S RESEARCH

St 43: Assessment of splenic function among transfusion dependent thalassemia patients.

Salman Zahir, Aneela Khan, Ammad Saeed, Muhammad Hamza. Northwest School of Medicine.

Objectives: 1. To identify the frequency of hypersplenism among transfusion-dependent thalassemia patients. 2. To determine the average age of development of hypersplenism among transfusion-dependent thalassemia patients. 3. To correlate transfusion with development of hypersplenism among transfusion-dependent thalassemia patients. **Study Design:** Single Centre-based Retrospective study. Graphic attachments (i.e., tables, illustrations and pictures): **Materials and Methods:** 1). STUDY DESIGN: Single-center based retrospective study. 2). STUDY SETTINGS: After the acquisition of NOC from the Fatimid Foundation, data of 50 randomly selected patients were retrieved from the hospital record. Consents were not obtained from the patients as this was a retrospective study and the patients/guardians were already consented by the facility regarding publishing and/or sharing clinical data of the patients. 3). STUDY DURATION: This study was conducted approximately in 2 Months duration (February,2019-April,2019). 4). SAMPLING TECHNIQUE: Convenience Sampling technique was applied. 5). DATA COLLECTION: Data were recorded on a self-structured questionnaire. 6). DATA ANALYSIS: The recorded data was transferred to Excel® sheets and SPSS® version 23 for analysis and presentation. **Results:** A total of 50 patients (18 males and 32 females) were enrolled on the study. The mean age of

participants was 19.68 ± 2.55 years with a range of 15 to 27 years. All the study patients ($n=50$; 100%) had developed hypersplenism at an average age of 6.86 ± 1.9 years. A total of 15 patients had undergone splenectomy, at an average age of 15.1 ± 4.6 years. The average number of annual transfusions received by the study patients was 19.1 ± 7.7 . Among the splenectomized patients ($n=15$), the annual pre- and post-splenectomy transfusion frequencies were 20 and 18 respectively. Likewise, the pre- and post-splenectomy transfusion Hb also remained statistically unchanged. **Conclusion:** 1). Findings from the current study infer that hypersplenism is frequently found among transfusion-dependent thalassemia patients from the local population. 2). Splenectomy among these patients does not seem to significantly benefit the patients in terms of improvement in transfusion frequencies. **Keywords:** Thalassemia, Hypersplenism, Blood Transfusion.

St 4: Frequency of self-medication among medical Students

Sara Jadoon. Khyber Girls Medical College.

Objective: This study was undertaken to determine the prevalence of self-medication among the students of Khyber Girls Medical College, Peshawar. **Study Design:** Cross-sectional study. **Materials and Methods:** A pre-designed valid questionnaire was used and was handed out to the students via their class representatives. **Results:** A total of 224 students, all females, were included in the study. Of the medical students surveyed, self-medication was reported among 73.33% students. The respondents who used self-medication found it time saving (34.2%), the most common reason for self-medication, other reasons were medicines of family members and having old prescriptions. The most common ailments for self-medication were headache (38.2%), flu (7.6%) and fever (6.7%). Students took medications from pharmacies (57.8%), which proved to be the largest source of medicines to students. Of

the respondents 10.2% experienced adverse effects, others were unaware of adverse effects. **Conclusion:** Prevalence of self-medication is high in the educated youth, majority being unaware of the adverse effects of medication that they themselves take and suggest to others. There is a need to educate youth to ensure safe practices. Strict policies need to be implemented on the advertisement and selling of medication to prevent this problem from escalating. **Keywords:** Self-medication, medical students, prevalence.

St 10: Has the Era Of Ultrasound In The Management Of Renal Stone Disease Come To An End?

Sheh Noor. Khyber Girls Medical College.

Objective: To compare the mean stone size between Ultrasound Abdomen Pelvis versus CT KUB and to correlate this difference in influencing final treatment modality in patients with renal stones. **Study Design:** Comparative study. **Materials and Methods:** It is a comparative study that was conducted in department of Urology IKD/KGMC Peshawar from 1st June 2022 till 31st August 2022. We included patients with renal stones only, irrespective of age and gender. We excluded patients who underwent POCUS and Bed side ultrasound. Total of 120 cases were selected by non-probability convenient sampling technique. All the patients were subjected to Ultrasound and CT KUB respectively. The data was collected on structured proforma and was analyzed on SPSS. **Results:** The mean age of patient was 36 ± 10.6 . 67 were male and 53 were female. Mean stone size on Ultrasound was 13.6 ± 7.4 mm. The mean stone size on CT KUB was 20.5 ± 9.2 mm. The mean stone sizes were comparable in both modalities in patients with renal pelvic and upper calyceal stones. However significant difference $p < 0.001$ was found in patients with renal stones in middle, lower calyx and stag horn stones. We found significant influence in correlation in change in selecting treatment modality after CT scan

in 70% ($p < 0.001$). **Conclusion:** There is significant difference in mean stone size on ultrasound and CT KUB. The CT KUB significantly influence the final treatment of renal stones. **Keywords:** Renal stones Ultrasound Abdomen and pelvis CT KUB.

St 36: Awareness and practice of informed consent among post graduate residents of surgical specialty.

Zahoor Ahmad, Muhammad Hamza, Palwasha Khan. Northwest School of Medicine

Objective: PRIMARY OBJECTIVES: 1. To determine the level of awareness of Post graduate residents of surgical and allied specialties regarding informed consent. 2. To determine the level of practice among post graduate residents regarding informed consent. SECONDARY OBJECTIVES: 1. To determine the barriers of improper informed consent. Study Design: cross sectional descriptive survey **Materials and Methods:** It was a cross sectional descriptive survey carried out in three public sector tertiary care hospitals of Peshawar, KP. The duration of study was 3 months from 1st July – 30th September 2021. Random sampling was performed and 255 participants were included. Inclusion criteria for this study were residents training in surgery and allied specialties. The questionnaire was self-reported questionnaire. Postgraduate Residents are those trainees who are enrolled in programs recognized by the Royal College of Physicians and Surgeons. Awareness is the state of being conscious of something or to be cognizant of events. Practice of medicine is the applying of medical or surgical knowledge for the purpose of preventing, relieving or curing disease or sustaining natural functions. **Results:** The respondent's characteristics of 255 participants showed that 63.8% of the respondents have excellent awareness, 34.6% have good awareness and 1.6% have fair awareness about informed consent. Also, among these 255 participants, 92.2% have

excellent practice and 7.8% have good practice of informed consent. **Conclusion:** This study concluded that residents of surgical specialties have satisfactory awareness about informed consent and were practicing it. However, improvement is needed which can be achieved by training the doctors at under graduate and post graduate levels. **Keywords:** INFORMED CONSENT, AWARENESS, PRACTICE, NON-COMPLIANCE.

St 40: relationship between social media addiction and depression among medical students in Peshawar. Hafsa Maqsood. Khyber Girls Medical College.

Objective: (i.) To investigate the perceptions of medical students regarding the usage of social media networks (ii.) To measure the relationship of social media and depression among medical students. **Study Design:** Cross sectional study design was used. **Materials and Methods:** A cross sectional study was carried out among the medical students of Peshawar. An online questionnaire was designed using Google forms and was send to the participants via what's app. The questionnaire was filled out by 282 participants. Data analysis was done using SPSS version 20 and MSEXCEL version 2010 was used to make graph and figures. **Results:** 56.7% were using social media for personal needs and interest, 10.6%were using for educational purpose andonly2.5% were using for professional purposes. We found that 40.1% were using social media for more than 10times per day, 36.9% use 2to 5 times in a day and 5.7% were using on only 7(2.5%) out of 282 participants, according to the scale have addiction and 275(97.5%) have no addiction. 193(68.4%) participants out of 282 were at the risk of clinical depression and 89(31.6%) have no clinical depression. **Conclusion:** According to our study, social media does not necessarily cause depression. We concluded that depression may be due to other causes like

stressful life, unemployment, family problems and low socioeconomic status. **Keywords:** social media, Depression, Medical students, Addiction.

St 39: Effect of Academic stress, Educational Environment on Quality of Life and Academic Performance of Medical and Dental students; Gauging Healthcare professionals' perspective on factors relevant to academic stress (Mix Method Study).

Muhammad Hassan Wahid, Mohammed Osama, Ijlal Aslam, Kashif Javed, Tariq Firdos, Abdul Ilah. Peshawar Medical college.

Objective: 1. To estimate the prevalence of Academic stress, to correlate the effect of Academic stress, Educational Environment on Quality of life and Academic performance, to know the perspectives of health care professionals on factors affecting stress. **Study Design:** Mix Method study conducted between Feb to May 2022(A cross sectional survey with 500 students from 2nd to final year are taken and Qualitative Interviews of 15 healthcare professionals are conducted). **Materials and Methods:** Participants completed the questionnaires comprising of DREEM inventory, Academic stress scale, WHOQOL scale. Health Care Professionals were also interviewed for their perspective regarding student's academic stress. The Quantitative data were analyzed using SPSS v.25 and the interviews transcripts were analyzed by thematic analysis. **Results:** The mean age of the sample (n=440) was 22.24 ±1.4 years. The Cronbach alpha reliability of DREEM inventory was 0.877, Academic stress .939 and WHOQOL .895. 230 (52.3%) students reported better QOL, majority perceive educational environment positively (n=323, 73.4%) and higher academic stress (n=225, 51.1%). Chi square test showed male had significantly more academic stress (p<0.05) those who perceived positive educational environment and better QOL have better academic performance (p<0.05).

Pearson correlation showed a significant correlation between academic stress, educational environment and QOL with academic performance ($p=.000$). On thematic analysis, 112 codes were generated which converged into 9 categories and finally 5 themes emerged. 1. Challenging educational environment and system, 2. Psychological need and support, 3. Individual differences 4. Relationship/family life, 5. Adjustment issues. **Conclusion:** Positive Educational environment leads towards better QOL. Students facing multidimensional stressors need timely psychological support. **Keywords:** Academic stress and Performance, Educational Environment, Quality of life.

St 24: Assessing the mental health status and sleep quality among house officers in Peshawar.

Abdul Moez, Aleena Ahmad, Adam Khan, Ayesha Ayub, Abuzar, Aiman Zahir. Northwest School of Medicine.

Objective: The objectives were to assess the mental health and the sleep quality of house officers, besides, between gender and hospital status, and a correlation between the health and sleep quality. **Study Design:** cross sectional study. **Materials and Methods:** A cross sectional study was conducted in 4 tertiary care hospitals. Pittsburgh Sleep Quality Index (PSQI) [4] scale was used for assessing the sleep quality and Warwick Edinburgh Mental Wellbeing Scale (WEMWBS) [3] for assessing the mental health of the respondent's study setting 4 tertiary care hospitals study duration 5 months, sample size 276. **Results:** Among the 276-house officers, the mean mental health score was 48.13 ± 9.17 , and mean sleep quality score was 6.39 ± 3.27 . In comparison, female House officers had poor mental health status (female: 45.72 ± 9.32 , male: 49.83 ± 8.70 , $p < 0.05$) and sleep quality (female: 6.91 ± 3.77 , male: 6.03 ± 2.82 , $p < 0.05$). The hospital status showed no association between sleep quality (p value: 0.778) and

mental health score (p value: 0.573). Furthermore, quality of sleep had a positive correlation with mental health status of house officers ($p < 0.01$). **Conclusion:** The overall mental health and sleep quality of house officers was poor. Female HOs had poor mental health and sleep quality compared to males. No significant difference exists between the mental health status and quality of sleep in public and private settings. However, HOs having a poor sleep quality also had poor mental health showing a positive correlation between the two factors. **Keywords:** Mental health, Sleep quality, Depression, Anxiety, Sleep deprivation, public hospitals, Private hospitals.

St2: Perception Of Undergraduate Medical Students Regarding Patient Safety During Clinical rotations.

Komal Qayyum, Arsalan Khan, Fatima Khan, Parkha Sethi. Northwest School of Medicine.

Objective: To study the perception and professionalism of undergraduate medical students regarding patient safety during their clinical rotations. **Study Design:** This was a descriptive cross-sectional single centre survey, including all the undergraduate medical students enrolled in Northwest School of Medicine of Peshawar, Khyber Pakhtunkhwa, Pakistan. **Materials and Methods:** Study Settings: This study was conducted in Northwest School of Medicine to evaluate the perception of undergraduate students regarding patient safety. Ethical Considerations and Study Duration: Ethical approval for this survey, was obtained from Institutional Review and Ethics Board (IREB) of Northwest School of Medicine and the affiliated hospitals. Before the start of the questionnaire, a statement was included that students have willingly participated in the survey. Proceeding to fill out the questionnaire was considered as consent obtained. After the acceptance of the proposal by the Institutional Review and

Ethics Board (IREB) of NWSM, the data collection was completed in July 2021. Analyses and write up of thesis were completed in September – October 2021. Study Design: This was a descriptive cross-sectional single centre survey, including all the undergraduate medical students enrolled in Northwest School of Medicine of Peshawar, Khyber Pakhtunkhwa, Pakistan. Study Population: The study population was all the undergraduate medical students studying in Northwest School of Medicine of Khyber Pakhtunkhwa. Our target population was all the undergraduate medical students. Sample Size and Sampling Technique: Convenience sampling technique was used to collect data from all the 500 undergraduate medical students (census) currently enrolled in the 5-year MBBS program of NWSM. Sample Selection: Inclusion Criteria/ Exclusion Criteria: The inclusion criteria were set as following: Active MBBS students of either gender, currently enrolled in Northwest School of Medicine recognized by Pakistan Medical Commission (PMC) were included in this census. Exclusion Criteria: The exclusion criteria were set as following: I. Those students not willing to participate in the survey were excluded. Instrumentation/Questionnaire Medical Students Safety Attitudes and Professionalism Survey (MSSAPS) tool, which is a very well-equipped questionnaire, was used to collect data from undergraduate medical students that was modified according to the setting of the study (Stéphanie Larramendy-Magnin et al). Part one of the MSSAPS included the demographic information of the medical students, such as age, gender and year of study etc. The variables in the questionnaire were 28 items measuring 5 divisions that were safety culture, teamwork. culture, experience with professionalism during clinical rotation, error disclosure culture at your hospital and comfort expressing professional concerns. The questionnaire had 5 main components regarding patient safety including, Safety Culture, Teamwork Culture,

Experiences with professionalism, Error disclosure culture, and Comfort expressing professional concerns. Each component had a set number of questions evaluating students' patient safety perceptions. It consisted of a total of 25-items with the sub-components divided as follows: Safety Culture: 8 items Teamwork Culture: 5 items Experiences with Professionalism: 6 items Error Disclosure Culture: 4 items Comfort Expressing Professional Concerns: 2 items Participants were instructed to rate each item by using a five-point Likert scale with the following response key: Response Key: 5 = Strongly agree 4 = Agree 3 = Neutral 2 = Disagree 1 = Strongly disagree The maximum score possible for all the items was 120 while the minimum possible score was 25. Data Collection Procedure: After the approval of the research proposal from the IREB, further permission from the administration of NWSM was taken through official permission letter for commencement of data collection. Before data collection, proper permission was taken from the head of departments in order to conduct the study. All the willing students were briefed about the purpose and procedure of the study and then informed consent was taken from them. The students who agreed were screened through inclusion and exclusion criteria. Data was collected by using a standard questionnaire. Every student was free to ask any kind of help while filling the questionnaire. Data Analysis Procedure: The data was analyzed by using SPSS (Statistical Package for Social Sciences) version 24. Percentages of demographic variables were obtained that included categorical data e.g. gender of the students and year of study etc. These demographic variables were analyzed by the descriptive statistics in SPSS and their frequency tables were generated. The mean scores and standard deviations of the students' attitude and perception and professionalism towards patient safety were obtained and then compared through independent sample t-test when it was two categorical variables such as gender while

Analysis of Variance (ANOVA) was used when the variables were 3 or more that is when the means of the score obtained by each year of study were compared. **Results:** The mean score of students was high (90.12 + 10.31), regarding their perception of patient safety. Comparison of knowledge scores between male and female students showed a slightly higher mean score [90.40(SD9.996)] for females compared to male students mean[89.86.(10.629)] but not statistically significant. Moreover, there was no significant difference between year of study of students in their perception of patient safety. Mean score of safety culture was [31.01(SD4.138)] which was the highest followed by [19.98(SD5.345)] for professionalism, [18.89(SD2.996)] team culture and lowest for error disclosure that was[12.75(SD2.995)]. **Conclusion:** Our results show that the participants have a keen understanding of patient safety and also are practicing it to a certain extent. To still improve its role further, we emphasize on the point that patient safety should be made an integral part of the undergraduate medical curriculum, and job training as it will not only benefit future doctors but will be something that will prevent the patients from unnecessary harm through medical errors. **Keywords:** Patient Safety, Undergraduate Medical Students, Professionalism, Safety Culture, Teamwork culture, Error Disclosure.

St23: Intentions of house officers in specializing from Pakistan or abroad and its' various influencing factors amongst medical graduates from Peshawar, Pakistan.
Daniyal Ahmed, Haroon Tariq.Northwest school of medicine.

Objective: 1. To determine the intention of medical graduates with regards to doing specialization either from abroad or in Pakistan. 2. To explain the various underlying factors that drive this brain drain phenomena. **Study Design:** The study design was cross sectional study. **Materials and**

Methods: The research design for this study was a cross sectional study which was carried out in four tertiary care hospitals of Peshawar KPK. The duration of this study was 5 months from March - July 2022. Data was collected through convenient sampling and 195 participants were involved in filling a self-structured questionnaire. **Results:** The results of this study revealed that out of 195 respondents 104(53.3%) intended to go abroad for specialization while 91(46.67%) opted to stay in Pakistan. 48.6% males and 59.3% females have intentions for going abroad with a p value of 0.138 which is not significant; implying that there is no difference between males & females in selecting their career choice. **Conclusion:** This study can help government to make appropriate policies to address brain drain. On basis of data collected if there is economic stability, better training facilities and attractive salary packages are being provided by state of Pakistan then there will be a decrease in the number of house officers migrating abroad. **Keywords:** House officers, Specialization, Brain drain, Residency.

SURGICAL & ALLIED

S12: Effect of betamethasone on early burns epithelization and prevention of hypertrophic scarring and contracture as well as early healing of the donor site.
Amber Azam. Northwest School of medicine.

Objective: There is a significant difference between with and without the use of Betamethasone, on epithelization, hypertrophic scarring and contracture formation as well as healing of the donor site. **Study Design:** Case control study. **Materials and Methods:** 0.1% topical betamethasone has been used on the deep dermal burns involving the face and other areas. They were compared with patients treated in other burn centers in a similar way except using Betamethasone. **Results:** We in

our study have included 94 patients from Sep, 2021 to Aug, 2022. 80% of them healed very well. Only 20% needed grafting later. Of the control group 50 out of 53 needed skin grafting after much delay i.e. later than three weeks **Conclusion:** The study strongly recommends the use of steroids for the treatment of burns from early on. This use enhances epithelization and prevents hypertrophic scarring and contracture.

Keywords: Betamethasone, Burns, Hypertrophic scarring, Contracture, Donor site.

S17: Outcome of hip arthroplasty patients at North West General Hospital & Research center.

Hussain Wahab. North West General Hospital and Research center.

Objective: Outcome of hip arthroplasty patients at North West General Hospital & Research center. **Study Design:** Retrospective data analysis. **Materials and**

Methods: Retrospective review of clinical records was done from Jun 2016 till June 2021 with minimum 6 months follow up. Data was collected for re admissions, infections, dislocations, or revision surgery.

Results: Total number of patients included in study was 169. Out of 169 patients 54 underwent THR, 9 underwent Bipolar hemiarthroplasty, and 106 underwent AMP. Out of these 3 patients were operated for infection. 1 patient had periprosthetic fracture for which cerclage wiring was done. One patient with bipolar hemiarthroplasty had dislocation which was managed conservatively. 4 patients in THR group had dislocation. One was managed with closed reduction, for one patient open reduction was done, and 2 patients under went for revision THR. **Conclusion:** Our study concludes that femoral neck fractures in the elderly are common and need to be dealt with in a facility where an Arthroplasty team can offer them better care and appropriate surgical options. Hemiarthroplasty is being performed more commonly according to the

ambulatory status and perhaps the frail nature of these patients but the number of complications remain higher in the total hip arthroplasty group. This could owe to the more active lifestyle of the group of patients to whom total hip arthroplasty is being validly offered. **Keywords:** Austin Moore prosthesis (AMP), Bipolar hemiarthroplasty and Total hip replacement (THR).

S28: Outcome of Infected Nonunion of Long Bones Treated by Single-Stage Bone Grafting and External Fixation at Northwest General Hospital, Peshawar, Pakistan.

Muhammad Ibrahim. Northwest General Hospital.

Objective: to evaluate the clinical, radiological and functional outcomes of infected non-union of long bones treated with single-stage bone grafting and external fixation. **Study Design:** Retrospective Study.

Materials and Methods: This retrospective study was carried out at the Orthopedics Department of Northwest General Hospital, Peshawar Pakistan from 2014 to 2021. Medical records of patients treated with Single-stage bone grafting and external fixation were reviewed. Preoperative plain radiographs for any sequestrum or sclerosed bone margins and baseline investigations (like CBC, ESR, CRP, and Vitamin-D status) were reviewed. All patients underwent radical debridement, external fixation, and autogenous bone grafting. The outcomes evaluated were a union of the bone (clinically and radiologically), resolution of infection, complication rate, and a number of re-intervention surgeries. **Results:** After treatment, the mean follow-up duration was 9.41 ± 4.48 months (4–18 months). None of the patients were lost to follow-up, had an infection recurrence, or required further surgery. The mean duration of bone union was 8.4 ± 4.48 months (range 3 to 17 months) and most of the patients achieved infection-free union with satisfactory functional outcomes. **Conclusion:** Single-stage bone grafting and external fixation is an effective

technique in terms of resolution of infection and satisfactory bone union without any complications and can be used as an alternative to Ilizarov for treating cases of infected nonunion of long bones. **Keywords:** External fixation, Infected nonunion, Long bones, Single-stage bone grafting.

S31: Outcomes of Endoscopic Myringoplasty – Sometimes less is more.

Imran Mohib Khan, Shahzad Saeed Ullah, Mobeen Ali. Northwest General Hospital.

Objective: To analyze our experience and results with endoscopic myringoplasty. **Study**

Design: Retrospective study Place and duration of study: Northwest General Hospital & Research Centre. Duration: 17th December 2019 to 24th January 2022.

Materials and Methods: Our database of patient records was manually checked, and patients were identified who underwent Endoscopic Myringoplasty in the specified time duration. The demographics, admitting notes, operating notes and discharge summaries were reviewed. The patients were assessed on follow up in OPD 2 weeks later via Otoscopy. If a perforation had developed in the graft at this time, the graft was considered to have failed. The information was compiled, and basic statistics were derived. **Results:** A total of 29 patients were identified who underwent Endoscopic Myringoplasty in our department were reviewed. Patient ages ranged from 14-52 years old (average age 26.75 years old) All our patients did not develop immediate post operative complications and were safely discharged the next day. Follow up Otoscopic examination at follow up showed 28 patients with an intact graft and only 1 patient with graft failure. **Conclusion:** Our success rate with Endoscopic Myringoplasty is 96.6%, which is comparable to the international standard success rate of 80-95%. Minimally invasive approaches to surgery are slowly being adopted in all surgical fields, especially due to decreased post operative pain and cosmetic benefits. The results of this study

encourage adopting an endoscopic approach where the expertise is available. An additional benefit could be exposure for post graduate trainees to advanced techniques. More use of this technique can help increase our sample size to help verify the success rate in further studies, as well as compare the outcomes to the microscopic approach. **Keywords:** Endoscopy, myringoplasty.

S33: Results of Lumbar Transpedicular Fixation for Spondylolisthesis, in Terms of Back Pain Relief.

Sohail Amir, Tabraiz Wali Shah. Hayatabad Medical Complex.

Objective: The goal of this study was to see how transpedicular fixation for degenerative spondylolisthesis affected lumbago. **Study**

Design: A retrospective observational study was commenced after approval from the Institutional review board and agreement from patients between May 2018 and February 2020, with a six month to five-year follow-up period. The research was carried out at Peshawar's Hayatabad Medical Complex's Department of Neurosurgery.

Materials and Methods: A retrospective observational study was conducted at the Department of Neurosurgery in Hayatabad Medical Complex, Peshawar between May 2018 and February 2020. Degenerative spondylolisthesis was diagnosed using static and dynamic spinal X-rays. The research excluded the patients with grade 5 spondylolisthesis, congenital anomalies, or prior spinal surgery. The visual rating scale was used to assess pain alleviation (GRS). Dynamic or static lumbosacral X-rays and 3D CT scans were used to assess union. **Results:** In total 70 patients, 38 (54.3%) were male and 32 (45.7%) were female. L5–S1 was impacted in most of the cases (68%). 40% of patients were having Meyerding grade II. All patients had pedicle screw fixation. Following surgery, 44 (63%) patients reported no pain, and 12 (17%) patients reported mild discomfort. 8 (11%) patients reported moderate pain and 6(9%) patients

experienced severe pain. There existed a significant difference between pre/postoperative moderate-severe GRS scores (p-value: 0.000336). After, surgery, we were able to negotiate surgical unions with 91.4% of the patients. **Conclusion:** For individuals with spondylolisthesis who need pain relief, transpedicular fixation is a safe, straightforward, and effective treatment. It also aids with the surgical union and the improvement of the neurological condition. **Keywords:** Spondylolisthesis, Meyerding grading, Transpedicular fixation.

S20: Frequency of dislocation after 6 weeks spica cast application in children having developmental dysplasia of hip.
Nabhan Rashad. Khyber Teaching Hospital.

Objective: To determine the frequency of dislocation after 6 weeks Spica Cast application after open reduction and internal fixation via anterolateral approach. **Study Design:** Descriptive Study **Materials and Methods:** A total of 99 hips were included in the study with children of both genders having age of 2 to 5 years. Children who received previous treatment, with other co morbidities in which radiographic evaluation was contraindicated and syndromic children were excluded. In all participants hips were reduced via anterolateral approach. Decision regarding femoral or pelvic osteotomy was made on the basis of stability tests of Zadeh and Caterall. Children were examined after 6 weeks of immobilization in Spica Cast, and it was followed by Cylindrical Cast with abduction bar for 4 weeks. Abduction brace and physiotherapy were given for the following 4 weeks. Frequency of dislocation was recorded on 14th week post operatively. **Results:** The Mean age of participants were 3.38 ± 1.07 years with range from 2-5 years. 58.58% were males and 41.41% were females. The participants having age 2, 3, 4 and 5 years were 25, 31, 24 and 19 respectively. Open reduction and femoral varus osteotomy was done in 53 cases while 12 patients had Open reduction and pelvic

osteotomy. Open reduction with both femoral varus osteotomy and pelvic osteotomy was done in 34 cases. Dislocation was recorded in 5 (5.05%) cases at 14th week post operatively. **Conclusion:** In comparison with other studies Spica casting for 6 weeks is equally effective to cast of 8-12 weeks. Keeping in view the warm and humid environment of our region it is safe to have a Spica cast for 6 weeks without compromising the reduction. **Keywords:** Spica cast, developmental dysplasia, dislocation.

S26: Posterior Fossa Tumor Surgery Complications in Children in a Developing Country's Tertiary Care Hospital.
Mustafa Qazi, Heela Hareer. Northwest General Hospital.

Objective: Posterior fossa tumours (PFTs) are the commonest childhood brain tumours with diverse clinical presentations, treatment modalities and postoperative outcomes. The literature has limited description of postoperative complications following surgery for these tumours. The aim of this study was to analyze the postoperative complications, which occur after PFT surgery in children. **Study Design:** Retrospective chart review. **Materials and Methods:** This is a retrospective chart review of children who were operated on for Posterior Fossa Tumors (PFTs). The occurrence of complications during the postoperative period was noted. Complications' management, in-hospital mortality and overall survival was also recorded until the time of discharge. The complications are divided according to the modified Clavien-Dindo classification and outcome was stratified accordingly. **Results:** The study participants included 79 (60.3%) males and 52 (39.7%) females with a mean age of 8.15 ± 3.3 years. The mean duration between onset of symptoms and diagnosis was 35.3 ± 16.6 days. Overall, there were 53 (40.5%) cases of medulloblastoma, 40 (30.5%) cases of ependymoma, 34 (26.0%) cases of pilocytic astrocytoma and only 4 (3.1%) cases of atypical teratoid/rhabdoid

tumor. 25 (19.1%) patients developed hydrocephalus postoperatively which was the most common complication. Other complications included a postoperative incisional CSF leak in 17 (13.0%) patients, wound infection and cerebellar mutism in 8 (6.1%) patients each, bleeding in the tumor bed and development of aspiration pneumonia in 5 (3.8%) patients each and development of hospital acquired pneumonia in 7 (5.3%) patients. The overall mean length of stay (LOS) was 5.4 ± 2.2 days with a minimum stay of 3 and maximum stay of 12 days. The overall mortality rate was 9.9% (n = 13). **Conclusion:** The most common complication is the development of hydrocephalus followed by cerebrospinal fluid leaks, cerebellar mutism, peri-tumour oedema, tumour bed haematoma and systemic complications such as meningitis, sepsis and postoperative pneumonia. **Keywords:** Posterior cranial fossa, tumor surgery, complications.

S21: Effectiveness of combined alginate and hydrocolloid surgical dressing in the quicker healing of debrided infected diabetic foot ulcers.

Muhammad Naeem. Khyber Teaching Hospital.

Objective: To assess the effectiveness of a combination of alginate and hydrocolloid dressing in diabetic foot ulcer in terms of wound healing in comparison with the routine pyodine dressing. **Study Design:** Randomized Controlled Trial. **Materials and Methods:** This Randomized Controlled Trial was carried out over 110 patients. After written consent, all the patients were treated with I/V antibiotics according to culture and sensitivity reports and were then followed by oral antibiotics for a period of 2 weeks. Patients were randomized into two groups, A and B. Group A patients underwent dressing with traditional pyodine. Group B patients underwent dressing using a combination of alginate dressing and colloid gel. The dressings were performed till the

complete healing of the wound after one month time and were observed for granulation tissue, wound discharge and control of infection. The outcome was measured in terms of reduction in wound size between the two groups. Data were tabulated, and the two groups were compared with reference to area and percentage reduction in the size of the ulcer.

Results: In this study, 110 patients were observed. Average age was $50.64 \text{ years} \pm 9.24 \text{ SD}$. Two groups were created, Group A and Group B. Patients were randomly allocated to each group, 55 to group A and 55 to group B. Group A patients underwent multiple dressings using a combination of alginate dressing and hydrocolloid gel till the complete healing of the wound after one month time. Group B patients underwent the traditional pyodine dressing and the effectiveness of group A was compared against group B. The mean pre-treatment wound diameter was $4.81 \pm 0.85 \text{ cm}$ in the Group B, while it was $4.84 \pm 0.81 \text{ cm}$ in Group A. $P = 0.875$). The mean post-treatment wound diameter was $3.90 \pm 0.76 \text{ cm}$ in the pyodine group, while it was $2.46 \pm 0.57 \text{ cm}$ in the alginate dressing plus hydrocolloid group (CI 0.44–0.58, $P = 0.022$). The mean wound difference was $0.91 \pm 0.25 \text{ cm}$ in the pyodine group, while it was $2.4 \pm 0.34 \text{ cm}$ in the alginate plus hydrocolloid group (CI 0.40–0.20, $P = 0.041$). The mean percent reduction in wound diameter was $19.2 \pm 4.6\%$ in the pyodine group, while it was $49.7 \pm 5.2\%$ in the alginate dressing plus hydrocolloid gel combination group (CI 10.6– 6.1, $P = 0.001$). **Conclusion:** There was significant contraction seen in the size of the ulcer in the combined alginate dressing and hydrocolloid gel group as compared to pyodine dressings. **Keywords:** Effectiveness, Alginate, Colloid dressing, Diabetic Foot Ulcer, Diabetic, Wound Healing.

S23: Improving health care standards by introduction of WHO Surgical Safety Checklist.

Imran Mohib Khan, Mamoor Khan.
Northwest General Hospital.

Objective: To introduce and implement a modified version of WHO surgical safety checklist (SSCL) in a private teaching hospital in Pakistan. **Study Design:** Audit cycle Place and duration of study: Northwest General hospital & Research Centre Peshawar, Pakistan, from 03/09/2019 till 15/10/2019.

Materials and Methods: This study included 226 consecutively selected cases involving various specialties. The data looked at the completion of modified WHO surgical safety checklist after being introduced in our hospital. The data collection was divided into two stages; Stage-1. In this stage data was collected for 113 consecutively selected patients undergoing various surgeries under general anesthesia, before the training session for the modified WHO SSCL was carried out. Stage-2. Data of 113 patients was collected after a one day training session organized with the aim to increase awareness of the WHO SSCL and ensure its implementation. **Results:** Initial data after introduction of WHO SSCL, showed reduced compliance with only 39.6 % of the checklist being completed correctly, 12.4% was partially completed and 48% was not completed. Data collected after the training session resulted in compliance with the use of the checklist improving significantly to 85.8% completed, 3.6% partially completed and not completed compliance reduced to 10.6% **Conclusion:** By introducing the WHO SSCL followed by increasing awareness and properly demonstrating the SSCL to relevant theatre staff, surgical standards can be improved with ensured patient safety. **Keywords:** WHO SSCL, Implementation, compliance, patient safety.

S32: Outcome of spinal deformity cases: our experience at mti/kth Peshawar.

Mohammad Ayaz khan. Khyber Teaching Hospital.

Objective: To evaluate the radiological and functional outcome of surgical treatment of different spinal deformities corrective surgeries at MTI/KTH Peshawar. **Study Design:** Case series **Materials and Methods:** We are performing different spinal deformity corrective surgery in KTH since 2013. We have corrected more than 200 scoliotic patients so far. Apart from scoliosis, other pathologies of the spine which we treated at KTH are: 1. Kyphotic deformities. 2. Degenerative diseases of cervical, thoracic and lumbar spine. 3. Infection of spine including TB. 4. All types of trauma. 5. Primary and secondary tumors of spinal column for mechanical and neurological stability. 6. Metabolic disorders e.g Osteoporosis. All the patients were assessed both clinically and radiologically and regular follow ups were done. For scoliotic deformities radiological outcome was assessed using Cobb angle measurement pre and postoperatively. **Results:** Excellent **Conclusion:** Scoliosis surgery can be done safely and effectively in a developing country like Pakistan. As more orthopedic surgeons receive training and the cost of implants becomes affordable, it is reasonable to expect that scoliosis surgery will become more readily available in other developing countries. **Keywords:** Spinal deformities, scoliosis, kyphosis.

BASIC SCIENCES.

B4: Antibigram Of North West General Hospital 1st July 2021 To 30 June 2022. Saman Hussain, Northwest School Of Medicine.

Objective: To find the antibiotic resistance and sensitivity pattern of various gram positive and gram-negative bacteria isolated from patients of North West General Hospital **Study Design:** Cross sectional study. **Materials and Methods:** In this study Disc Diffusion method on Mueller Hinton Agar was employed to test the antibiotic

susceptibility pattern of two gram positive and nine gram negative bacteria isolated from various samples taken from 1st July 2021 to 30 June 2022. All the antimicrobial discs were employed according to CLSI 2020.

Results: This study showed that Streptococcus and Staphylococcus were resistant to most of the antibiotics except Linezolid and Vancomycin. E.Coli and Klebsiella were mostly sensitive to Colistin, Meropnem and Imipenem. Pseudomonas was mostly sensitive to Tazocin, Imipenem, Meropnem and Sulzone. Proteus was resistant to most antibiotics except Amikacin, Cefipime, Imipenem and Meropnem. Salmonella was found sensitive to Gentamycin, Amikacin, Imipenem, Meropnem and Colistin. Enterobacter was mostly sensitive to Gentamycin, Colistin and Fosfomycin. Citrobacter was resistant to most antibiotics except to Gentamycin, Amikacin, Imipenem, Meropnem, Colistin, Nitrofurantoin, Fosfomycin and Ertapenem. Providencia group was mostly sensitive to Colistin, Nitrofurantoin, Fosfomycin and Ertapenem. Acinetobacter was resistant to almost all antibiotics except Colistin.

Conclusion: The misuse and disuse of antibiotics has led to multidrug resistant strains of bacteria in Peshawar. The antibiotic resistance is also due to decreased compliance of antibiotics. **Keywords:** Mueller Hinton agar, Amikacin, Gentamycin, Acinetobacter, Proteus, Antibioqram.

B5: Differential analysis of HPV16-human and EBV1-human protein interaction networks to identify new protein candidates in head and neck squamous cell carcinomas. Arsalan Riaz, Rehman Medical Institute.

Objective: HPV infection specifically the subtype HPV16 is significant risk factor in the initiation and progression of Oropharyngeal Squamous Cell Carcinoma (OPSCC), more prevalent in the western part of the world. However, Epstein Bar Virus 1 (EBV1) induced Head and Neck-SCC are more prevalent in South Asian countries. This study carries out a comparative computational analysis using

protein interactions between HPV16 proteins and protein products of key OPSCC and Oral-SCC cancer genes, which aims to investigate the role of HPV16 and EBV1 in OPSCC and OSCC.

Study Design: Comparative bioinformatics analysis **Materials and**

Methods: We created a protein interaction network of HPV16 and human proteins followed by retrieval of mutated genes in OPSCC and OSCC from the cBioPortal database and GDC Portal, along with literature mining. We used MCODE and ClueGo tools for cluster and enrichment analysis, respectively. Drug candidates against the common interacted proteins were found using drug databases like PanDrug.

Results: After annotating the HPV16-Human PPI network with proteins encoded by genes found to be mutated in both cancers, 31 proteins in OP-SCC and 17 proteins in O-SCC were in direct interaction with the viral proteins especially, E5, E6, and E7. The immediate network (first neighbors only) appeared to be sparse, but after looking at the broader HPV16- Human network we found 5 highly connected modules, 4 of which were dominated by proteins encoded by genes mutated in OPSCC as compared to OSCC, indicating the influence of HPV16 on OPSCC. Based on module integrity and topological characteristics we identified 4 significant candidates for HPV16-driven OPSCC i.e. MYC, CREBBP, PML, and RB1 which are significantly enriched in cancer pathways.

Conclusion: Knowledge for the EBV induced OPSCC and OSCC is scare. We created a protein interaction network for EBV1 and Human proteins to analyze the topological characteristics especially of proteins encoded by genes mutated in HNSCC using the same methodology and we identified 5 candidate proteins i.e. EP300, CUL3, RB1, DDB1, and CREBBP for further in vitro validation.

Keywords: EBV Infections, HPV infections, head and neck cancer, Protein-Protein Interactions network

B8: Extensively drug resistant (XDR) outbreak of typhoid fever in Hayatabad, Peshawar.

Naeem Khattak. Northwest School of Medicine.

Objective: To identify trends in the resistance pattern of Salmonella Typhi isolates (January 2012 - September, 2002) and whether the extensively drug resistant (XDR) isolates are replacing the relatively antibiotic sensitive Salmonella typhi isolates.

Study Design: Typhoid fever persists as an important public health concern in developing countries of Asia, Africa and Latin America, where it is endemic¹. Extensively drug resistant (XDR) outbreak of typhoid fever was reported in Hyderabad in November, 2016 which spread to the entire Sindh Province infection with more than 5000 cases by December, 2018. Here we report the preliminary findings of a similar outbreak of ceftriaxone-resistant (XDR) Salmonella Typhi in Hayatabad, Peshawar, using data collected from January 2021 to August 2022. **Materials and Methods:** For this retrospective cross-sectional study, laboratory based antimicrobial resistance surveillance data of Salmonella Typhi from January 2012 to September 2022 from Northwest General hospital & research Centre was analyzed. Standard biochemical tests and Analytical Profile Index (API) identification kits (BioMerieux). Antimicrobial susceptibility of Salmonella Typhi was determined using disc diffusion method following Clinical Laboratory & Standards Institute (CLSI) guidelines, 2021. **Results:** We observed an abrupt rise in the number of cases of Salmonella Typhi in Hayatabad, Peshawar in 2021. A total of 280 cases of Salmonella Typhi were confirmed and of these, 124 cases (44%) were extensively drug resistant (XDR). The demographic details of these cases were shared with Director General Health Services, Peshawar. Lack of effective source control has resulted in a

phenomenal rise in the number of extensively drug resistant (XDR) Salmonella Typhi cases. Of the 282 cases in the current year (2022), 92% of the typhoid fever cases are extensively drug resistant (XDR) Salmonella Typhi. **Conclusion:** Public health awareness, immunization, provision of safe drinking water supplies and sanitary measures are required for effective elimination of extensively drug resistant (XDR) typhoid outbreak in the community. These efforts are reflected in the surveillance data, there being virtually no cases of extensively drug resistant (XDR) typhoid in 2020 to 282 cases in 2022, a rise of 92% **Keywords:** Typhoid fever, Extensively drug resistant (XDR) outbreak, Salmonella Typhi.

B29: Comparative Analysis of Hepatotoxic Potential of Simvastatin with Rosuvastatin Via Hepatotoxicity Induced in Swiss/BALB-C Mice.

Sarwat Jahan, Sher Afghan, Inayat-Ur-Rehman, Abid Hussain, Omar Farooq, Abdus Salam, Maaz. Northwest School of Medicine.

Objective: To compare the hepatotoxic potential of Simvastatin with Rosuvastatin **Study Design:** Experimental study **Materials and Methods:** Study setting: Pharmacology Dept, Animal house Northwest School of Medicine Hayatabad Study duration: 3 weeks Sample size: 15 BALB/C male mice, weighing between (25 to 30 gm), aged 5-7 weeks Sampling Technique: Simple random sampling Sample collection: Inclusion criteria: Male BALB/C mice aged 5 to 7 weeks. Exclusion criteria: Female mice, Inactive mice and mice with any deformity. An experimental study was conducted in the department of Pharmacology & Therapeutics on a sample of 15 mice, randomly divided into 3 groups of 5 mice each for 3 weeks. In the normal control group (n=5 mice), 5 mice were given 1 ml of saline intraperitoneally(I/P) daily. In the simvastatin group (n=5 mice) 50mg/kg of simvastatin was injected intraperitoneally (I/P) in saline daily.

In the rosuvastatin group (n=5 mice) 50mg/kg of rosuvastatin was injected I/P in saline daily. At the end of the experiments after 3 weeks mice were dissected in the pharmacology department, Northwest School of Medicine. Assessment of the bilirubin, enzymes including alkaline phosphatase, aspartate transaminase enzyme and alanine aminotransferase enzyme was performed from the blood samples collected. Data was analyzed through social sciences (SPSS) version 23. Continuous variables were chosen. The arithmetic means of the observed values were calculated. Results were expressed as mean \pm S.E.M. **Results:** The average weight of the mice in group 2 reduced from 30g initially to 21g by the end of 3 weeks. Mean serum ALT levels significantly raised to a mean value of 320.4 ± 37.85 , AST to 320 ± 126.86 U/L, while Bilirubin was 0.12 ± 0.01 mg/kg. Weight in group 3 reduced to an average of 26g with a raised ALT of 179.8 ± 26.02 U/L, AST of 196 ± 15.79 U/L and Bilirubin of 0.12 ± 0.01 mg/dl. **Conclusion:** Rosuvastatin has the potential to induce hepatic damage and raise the liver function parameters. When compared to Simvastatin induced hepatotoxicity, however, Rosuvastatin can be labelled as being less hepatotoxic, owing to a lesser rise in ALT, AST and bilirubin. **Keywords:** Hepatotoxicity, Simvastatin, Rosuvastatin, HMG-CoA Reductase.

B30: Hair And Skin Manifestations In Factory Workers With Arsenic Exposure In Hayatabad Industrial Estate Peshawar.

Mahvish Javed, Zilli Huma, Zeeshan Kibriya, Adeel Alam. Khyber Girls Medical College.

Objective: I have specifically conducted this study in industrial state Hayatabad Peshawar to analyze arsenic level in water sources of factory workers and their household residing in the same area and compare it with their

hair arsenic level, hair histomorphology and skin diseases so that magnitude of the arsenic poisoning is evaluated. **Study Design:** Cross- sectional study. **Materials and Methods:** After taking informed consent and filling up the questionnaire from 81 factory and their non- factory house hold members living and working in the same industrial estate, water and hair samples were collected by random sampling from one pharmaceutical company and nearby labor colony. The samples were then analyzed for arsenic through atomic absorption spectrometer in public health laboratory Khyber medical college Peshawar. Hair morphology was carried out in histomorphology laboratory Khyber Medical University Peshawar. All the hair samples were mounted and slides were analyzed under light microscopy. The results obtained of both the groups (industrial workers and their non-industrial workers households) were compared with hair histomorphology and skin manifestations. The data was analyzed and entered by using SPSS version 20. **Results:** Total population under study was 200 out of which 81 factory workers with mean age of 21 years working in same factory for more than six months and their 81 housed holds with mean age of 25 years living in same area for more than six months. The arsenic level in drinking water, colony tube well and households was not within the permissible level of WHO ($10\mu\text{g/L}$) but it is less than $50\mu\text{g/L}$ as established by Pakistan government. The arsenic level in factory effluent was also increased i.e. $68\mu\text{g/L}$. Hair arsenic level also came out to be within the normal values i.e. $<1.00\mu\text{g/g}$. There was no significant change in hair morphology and arsenic specific cutaneous manifestations were also non- specific. **Conclusion:** The statistical data concluded that the water levels for arsenic was not within the permissible range of W.H.O and elevated levels of arsenic in factory effluent shows that the factory effluent is contaminated with arsenic and they are not properly treated hence people living near the

industrial state or working in these factories are somewhat exposed to toxic effects of arsenic. No as such elevated levels of arsenic has been seen in hair of the population under study, similarly hair morphology and skin manifestations could not be correlated with chronic arsenic poisoning effects
Keywords: Skin manifestations, hair histomorphology, permissible arsenic levels, atomic absorption spectrometry

B22: Development of Primary Brain Tumour cell cultures and Bio-banking.
Irum Javaid, Zilli Huma. Northwest School of Medicine.

Objective: 1) Initiation of primary brain tumour cell lines from the local population of Peshawar 2) Morphological analysis of live tumour cells **Study Design:** Experimental study **Materials and Methods:** Primary brain tumour cell lines were established with tumour samples from Hayatabad medical complex and Northwest general hospital. The tissue samples were processed in the cell culture laboratory and dissociated tumour cells were cultured in growth media and incubated at 37°C in 5% CO₂. The attached monolayer cells were analyzed for various morphologies. **Results:** Cell lines were developed from three samples of primary brain tumours which included two gliomas and one meningioma. The cell counts over a four-week period revealed that glial cell type was the dominant morphology at end of 4th week. SOX2 expression was found in all cells and tissues but higher in cells with a mean percentage of 45% as compared to tissue having mean percentage expression of 11.3%. **Conclusion:** Primary cultures from brain tumour developed. Morphological analysis of the primary brain tumour cultures demonstrated the presence of different cell types with glial type being dominant in our 3 samples. SOX2 was detected in cultured cells and original tumour tissue in all samples. No apparent correlation was found between dominant morphology and SOX2 expression with tumour aggressiveness **Keywords:**

Primary brain tumours, Cell culture, Brain tumour stem cells, SOX2

B34: Comparison of Urinary Interleukin-18 as a Biomarker of Acute Kidney Injury with Routine Markers in Critical Care Units of Tertiary Care Hospitals of Peshawar.

Mahum Farooq, Ahmad Rafiq, Mohsin Shafi, Nomana Khalil, Ihsan Ullah, Safia Rehman, Zarmina Hussain. Khyber Medical College.

Objective: This study evaluated the role of IL-18 in early detection of Acute kidney injury, in turn helping the physicians reduce morbidity and mortality related to the disease **Study Design:** Cross-Sectional study. **Materials and Methods:** The patients were registered in this research from the ICUs of three hospitals of Peshawar that provide tertiary care, namely Lady Reading Hospital, Khyber Teaching Hospital and Hayatabad Medical Complex. The samples were processed and analyzed at Khyber Medical College, Peshawar, KP. Critically ill adults (older than 18 years), both male and female, showing signs of AKI less than 4 hours before the sample is taken were included in the study. All participants who had a past with end-stage renal disease or were on chronic dialysis and post-kidney transplantation, those who received RRT at any time before admission, those with end stage liver disease or terminal malignancy, and post cardiopulmonary resuscitation patients were excluded from the study. Data was recorded in pre-designed questionnaires after taking informed consent. Data was recorded & analyzed in SPSS version 26. **Results:** In this study 156 acute kidney failure (AKI) patients were included, in which males were in the majority 94(60.3%), female were 62(39.7%). Age ranged from 18-80 years with mean age of 38.96±15.07 years. Majority of the patients were present in age group 18-25 years and 26-35 years 38(24.4%) in each group. Most of the participants were married 125(80.1%), while rest 31(19.9%) were unmarried. Regarding the education status,

most of the participants 53(34%) were illiterate, 36(23.1%) had primary education, 22(14.1%) had middle, while university was attended by 25(16%). 28(17.94%) were housewives, 17(10.89%) drivers, 13(8.33%) maid, 10(6.41%) laborer, 9(5.76%) cook. **Conclusion:** Conclusion As Per our Results, we concluded that Urinary Interleukin-18 can be utilized as a sensitive indicator of Acute Renal Injury as an early diagnostic marker for patients admitted in Critical Care Units. This, in turn presents clinical indications which can be utilized to predict early Acute Renal Injury. **Keywords:** Kidney injury, IL 16, Urine, Creatinine.

B37: Types and frequency of Hemoglobinopathies, frequency of consanguinity in the general population of Peshawar.

Murad Tariq, Muhammad Hanif, Sadiq Umar. Rehman Medical Institute.

Objective: Our main objective of the study was to discover the different types of hemoglobin disorders, consanguinity ratio and their prevalence of Peshawar. **Study Design:** The cross-sectional retrospective study. **Materials and Methods:** The cross-sectional retrospective study included 263 patients from march 2021 to February 2022 at two general hospitals (Rehman medical institute and PIMS Peshawar) Patients' age, gender and marital status (consanguinity) details were recorded. **Results:** Out of 263 Patients 111 (42%) patients had Hemoglobinopathies; rest of the 152 patients had a normal Hb Electrophoresis pattern. Majority of the patients diagnose with Hemoglobinopathies are Females (62.44%) than Males (37.56%). Among these the 38.5% patients' parents are relative in which consanguinity frequency was 33.17% and 13.66% patients have known case of thalassemia. Among these patients' majority was children (1-10 years age). Out of 111 patients with Hemoglobinopathies, 77.48% had B-thalassemia minor and 19.82% had B-thalassemia major, while frequency of sickle

cell disease 2.70% and sickle cell trait was 0%. **Conclusion:** According to our study we concluded that majority of cases in Peshawar is Beta thalassemia minor in which females are more affected then male due to cousins marriages because Hemoglobinopathies most common cause is mutation in globin gene and it is inherited from parents **Keywords:** Hb electrophoresis, Hemoglobinopathies, B-thalassemia, sickle cell disease

B7: Prioritizing Health System Building Blocks to Cope with Current & Future IDPs in Pakistan: A Mixed Methods Approach. Muhammad Imran Marwat. Khyber Medical College.

Objective: To ascertain the public health needs of IDPs and to explore challenges faced by the managers of health departments of Khyber Pakhtunkhwa province to respond to the public health needs of IDPs and to explore policy recommendations under a devolved health system. **Study Design:** Mixed Methods (Qualitative and Quantitative) **Materials and Methods:** Survey interviews (384 in number) with the IDPs of Jalozei camp and Key Informant interviews (12 in number) with the managers of health department were carried out. **Results:** Study findings revealed lack of skilled workforce, lack of political will, financial limitations and poor inter- sectoral collaboration had an impact on response to the humanitarian crisis in the province of Khyber Pakhtunkhwa. **Conclusion:** Study findings suggest that there is a dire need for development of overarching binding international laws as well as local national policies for complete protection of IDPs particularly encircling their health, shelter and social security. **Keywords:** IDPs, Devolution, Health Services, public health needs and Pakistan.

B15: Prevalence of HFE gene mutation and its association with serum iron and serum ferritin levels.

Sikandar Ali Khan. Khyber Girls Medical College.

Objective: To determine the prevalence of hereditary hemochromatosis gene mutations among the general population of Peshawar district. (2)To correlate the hereditary hemochromatosis gene mutations with serum iron and serum ferritin levels. **Study Design:** Observed Cross sectional **Materials and Methods:** Informed consent was taken. blood sample was collected DNA extraction was done PCR performed Gel electrophoresis done NGS done from CHINA Results were analyzed through CLUSTAL W Serum iron and serum ferritin done through method. We amplify 2 hot spots of HFE gene, one on axon 2 and one on axon 4. as they were already present in Literature. **Results:** there was single mutation found in axon 2 and 3 mutations were found in axon 4. Samples having mutations on axon number 2 was checked for serum iron and serum ferritin level and P value comes out to be less than 0.01 Samples having mutation on axon number 4 was checked for serum iron and serum ferritin level and P value comes out to be more than 0.01 **Conclusion:** as iron deficiency anemia is very common in our population. we never had an idea of iron over load (Haemachromatosis), which is because of mutation in HFE gene. we should develop our own country database. so that any such medical conditions can be prevented and treated. **Keywords:** HFE Gene: Human hemochromatosis gene PCR: Polymerase chain reaction

POSTER PRESENTATIONS

MEDICINE AND ALLIED

M1 : Thyrotoxic periodic paralysis (TPP)- A case report.

Arshad Hussain, Ahsan Nadeem Malik. Northwest General Hospital & Research Centre.

Objective: To report a case of thyrotoxic periodic paralysis (TPP) in 41-year-old male. **Study Design:** Case Report. **Materials and Methods:** Thyrotoxic periodic paralysis (TPP) is an uncommon complication of hyperthyroidism described by episodes of severe muscle weakness along with hypokalemia. TPP is usually present in Asian, and non Asian ethnic group can also be affected with increasing incidence in western countries. TPP is a correctable cause of hypokalemic periodic paralysis, can frequently be the first sign of thyrotoxicosis. **Results:** We present a case of 41-year-old male presented with attack of severe muscle weakness and on physical examination there were sign of hyperthyroidism like sweating and tachycardia. Initial workup was done. Initial potassium level was 2.8 mmol/L, Thyroid-stimulating hormone (TSH) was 0.8 μ U/mL(reference range 0.4–4) while free T4 was 6.6 [5.0-13.0 ug/dl]. An initial diagnosis of hypokalemia periodic paralysis was made, and IV potassium 20 mEq/L along with oral replacement was started following which limb weakness improved. He was given a treatment plan in which main aim is to make patient euthyroid for which he was prescribed drug regime of beta blocker and carbimazole. Furthermore he was advised to control diet (low carbohydrates) and stop strenuous exercise. Finally he was diagnosed a case of TPP secondary to hyperthyroidism. **Conclusion:** TPP is typically present in young men and can be the first sign of thyrotoxicosis and it can present atypically and probably to be missed initially. Therefore, thyroid function test should be performed in all patients of periodic paralysis to make early diagnosis of TPP and to start definitive treatment as it does not occurs once euthyroid is achieved. **Keywords:** Graves' disease, hypokalemia, thyrotoxicosis, thyrotoxic periodic paralysis, hyperthyroidism.

M2: A rare form of Mayer-Rokitansky-kuster-Hauser syndrome- case report.

Arshad Hussain, Faran Younas. Northwest General Hospital & Research Centre.

Objective: To report a rare form of Mayer-Rokitansky-kuster-Hauser syndrome. **Study Design:** Case report. **Materials and Methods:** Mayer-Rokitansky-Küster-Hauser (MRKH) syndrome is a congenital disorder characterized by aplasia of the uterus and upper part of the vagina in females with normal secondary sex characteristics and a normal female karyotype (46XX). **Results:** We report a 15-year-old girl who presented with primary amenorrhea and short stature. Clinical examination showed normal secondary sexual characteristics. Height and weight was below 3rd centile. Initial workup was done. The patient blood investigations were as follows: follicle-stimulating hormone (FSH) <0.11mIU/mL(reference range 0.0–10), luteinizing hormone(LH) <0.12mIU/mL(reference range 1.7–15), thyroid-stimulating hormone(TSH) 1.67 µIU/mL(reference range 0.4–4), Estradiol 83 pg/mL (reference range 15–350),Cortisol(morning), Growth hormones(GH) 2.00 ng/dL (reference range 15–70) , and prolactin 53.05 ng/dL(reference range 5.18–26.53).Karyotypically she was 46XX. Her X-ray for bone age was 16-17years and MRI brain showed normal study. An abdominal ultrasound shows an infantile uterus. In the MRI pelvis, the uterus was not visualized. Both ovaries appear normal, which confirms the diagnosis of MRKH syndrome which is typically known by the congenital absence of the uterus and the upper part of the vagina in women who have normally developed secondary sexual characters along with a normal female 46,XX karyotype. The reported incidence is about 1 in 4000–5000 live births. They are usually sporadic, although familial cases have also been described, denoting a probable genetic cause. **Conclusion:** Biochemical screening is essentially normal as these patients have

normal functioning ovaries. Management of this condition includes screening associated anomalies. Psychological counselling and surgical adjustment to create a neovagina when the patient is ready to start sexual activity are the main modalities of treatment for MRKH syndrome **Keywords:** Mayer-Rokitansky-Küster-Hauser (MRKH) syndrome; congenital disorder; female karyotype (46XX); aplasia of the uterus.

M3: Patients and disease characteristics of type 2 diabetes mellitus: A cross sectional analysis of 1263 patients.

Arshad Hussain, Adnan Rahman. Northwest General hospital & Research Centre.

Objective: Diabetes Mellitus (DM) is one of the most prevalent diseases globally with an increasing incidence. It is one of the major causes of premature mortality and has been recognised as one of the top most public health priorities. The unique features of DM call for an interdisciplinary approach. The study was undertaken to analyse patients and disease characteristics of Pakistani and Afghani patients with type 2 DM. **Study Design:** Descriptive cross sectional. **Materials and Methods:** This descriptive cross sectional study was conducted from 29 January 2014 to 31 October 2019 in Northwest general hospital & Research centre, a tertiary care hospital, a Venture of Alliance Healthcare (PVT) Ltd, located in the historic city of Peshawar. Its catchment area is all over the province of Khyber Pakhtunkhwa and nearby border areas of Afghanistan. All pertinent clinical and disease-related information was recorded on a structured questionnaire. Chi square test, student independent test, and Mann-Whitney test were used to see differences between Pakistani and Afghani on the different characteristics. **Results:** A total of 1263 patients (72.7% Pakistani and 27.3% Afghani) were included in the study. Mean age, weight and BMI were comparable in both groups. Smokers were higher in Afghani. Diastolic blood pressure was

significantly higher in Pakistani patients. Likewise mean time since diagnosis of DM was higher in Pakistani ($p=0.05$). On the other hand ischemic heart diseases ($p>0.05$) and hypertension ($p=0.001$) were more prevalent in Pakistani. Mean values of serum lipids were comparable in both groups. HbA1c was higher in Afghani patients (16.5% vs 9.5 %, $p=0.060$). Majority of the Afghani reported to have poor dietary control ($p<0.001$) whereas Pakistani were comparatively inactive ($p=0.002$). **Conclusion:** The results of this study showed comparable patient and disease related characteristics except for comorbidities, risk behaviour, glycemic control and complications. Moreover dietary and exercise compliance was also differed. Health education is considered to be essential in the overall care. Patients should be educated regarding healthy eating; regular exercise, weight loss and glycemic control to prevent or delay complications and optimize quality of life. **Keywords:** Diabetes mellitus; Complication; patients characteristics; Lipids.

M6: A Rare and Unique Pattern of Micronodular and TSH Receptor Antibody Positive Graves' disease.

Arshad Hussain. Northwest General Hospital & Research Centre.

Objective: To report a rare and unique pattern of micronodular and TSH receptor antibody positive graves' disease. **Study Design:** Case Report. **Materials and Methods:** Graves' disease is the leading cause of hyperthyroidism. It is an autoimmune thyroid disease caused by autoantibodies to the thyroid stimulating hormone receptor (TRAb) having different patterns on ultrasonography and antibody titers which predict different clinical course of disease. **Results:** A 45-year-old woman presented to a general practitioner with complaints of headache, palpitations, excessive sweating and weight loss of 6 kg over the last few weeks. Clinical examination showed diffuse goiter with no bruit, fine

tremors in hand but no ocular manifestation. Initial laboratory investigation showed low TSH levels 20 ug/dl [5.0-

13.0ug/dl]. Keeping in view the abnormal thyroid function tests, she was started on carbimazole 10mg and beta blockers twice daily and referred to endocrine clinic, there she presented after 6 weeks with same complaints, on assessment she was found to be slight overweight (Weight=62 kg, Height=154cm, BMI=26.16), normal core temperature, pulse rate 92beat/minute and blood pressure 145/85mm Hg. Carbimazole was withheld for thyroid uptake scan (Tc99m) as thyroiditis needs to be ruled out given the short history. Thyroid uptake scan showed 33.4% thyroid uptake function. Thyroid ultrasound showed scattered, uneven hypoechoic foci ranging 2-3 mm in diameter in an otherwise regular thyroid texture with increased vascularity suggestive of micronodular Graves' disease, Repeat Labs showed TSH levels

0.24mIU/ml, FT4levels 0.67ng and T30.77 [reference range 0.79-1.49 TRAb came to be 19.34 IU/L [<1.75 cutoff]]. Treatment continued and carbimazole was titrated.

Conclusion: Hypoechoicmicronodular pattern is rare and unique; shows strong positivity of TRabs and studies propose that carbimazole treatment should be prolonged from usual and TRAbs positivity at the end of medical treatment have greater probability of relapse. Suppressed TSH and persistent thyrotoxicosis symptoms differentiate micronodular from other forms of Graves' disease. **Conclusion:** Micronodular pattern of Graves shows persistent low TSH levels high TRabs and delayed response to carbimazole.

Keywords: Case report, Thyroid disease ,Graves' disease, micronodular pattern.

M-7 Title: To Audit Management Of Acute Upper Gastrointestinal Bleeding In Acute Medical Unit Of Lady Reading Hospital, Peshawar.

Dr. Aima Yousaf Lady Reading Hospital, Peshawar Pakistan.

Objective: To audit the management of acute upper gastrointestinal bleeding of patients admitted in acute medical unit of Lady Reading hospital following guidelines of British Society of gastroenterology. To standardize the management of acute upper gastrointestinal bleeding. To improve clinical outcomes of patients presenting with acute upper gastrointestinal bleeding. **Study Design:** A clinical Audit. **Materials and Methods:** The retrospective secondary-data study was conducted at Acute Medical Unit, Lady Reading Hospital, Peshawar, Pakistan from April 2022 to July 2022. Data was analyzed using SPSS 2.0. **Results:** Out of 28 patients, 23 (82.1%) were male and 5 (17.9%) were female. The overall mean age was 58.75 ± 18.39 years (range: 17-95 years). Out of 28, variceal bleed was the cause in 17 (60.7%), and non-variceal in 11 (39.3%). Out of 17 patients with variceal bleed, 15 (88.2%) received Terlipressin, 14 (82.4%) antibiotics and 15 (88.2%) received proton pump inhibitors respectively. Similarly, out of 11 patients with non-variceal bleed, 4 (36.4%) received Terlipressin, 10 (90.9%) received antibiotics, and 10 (90.9%) received proton pump inhibitors respectively. Glasgow-Blatchford score was not calculated in any patient. **Conclusion:** Out of 28 patients, 23 (82.1%) were male and 5 (17.9%) were female. The overall mean age was 58.75 ± 18.39 years (range: 17-95 years). Out of 28, variceal bleed was the cause in 17 (60.7%), and non-variceal in 11 (39.3%). Out of 17 patients with variceal bleed, 15 (88.2%) received Terlipressin, 14 (82.4%) antibiotics and 15 (88.2%) received proton pump inhibitors respectively. Similarly, out of 11 patients with non-variceal bleed, 4 (36.4%) received Terlipressin, 10 (90.9%) received antibiotics, and 10 (90.9%) received proton pump inhibitors respectively. Glasgow-Blatchford score was not calculated in any patient. **Keywords:** AUGIB, BSGE, Terlipressin,

M17 : Eectiveness of Liraglutide with or without oral antidiabetic drug therapy in patients with T2DM in terms of body weight reduction and glycemic improvement.

Arshad Hussain, Nadeem Zeb. Northwest General Hospital & Research Center.

Objective: This study aimed to look into the effects of Liraglutide with or without (OADs) on glycosylated hemoglobin (HbA1c) and body weight in T2DM. **Study Design:** Prospective observational study. **Materials and Methods:** A prospective observational study was conducted in Northwest General hospital & research Centre, Peshawar. A total of 53 adult patients of either gender with T2DM using OADs with or without insulin were enrolled in the study from November 2020 to April 2022. Liraglutide was initiated at a dose of 0.6 mg/day then raised to 1.2 mg/day after 1 week and later to 1.8 mg/day depending upon patient preferences and tolerability. Patients were assessed for changes in the body weight, fasting blood glucose (FBG), random blood glucose (RBG) and HbA1c at baseline and follow-up (16 weeks) respectively. **Results:** At 16 weeks mean weight was 101.68 ± 18.11 vs 105.48 ± 19.60 , $p = 0.007$ at baseline, a reduction -3.80 ± 6.40 kg in weight was noted. Similarly, mean HbA1c also decreased significantly from baseline to follow-up (9.24 ± 1.62 vs 7.04 ± 1.30 , $p = 0.001$). The mean differences in BMI and RBS from baseline to follow-up are -2.04 ± 2.66 ($p=0.001$) and -77.40 ± 82.28 ($p=0.016$) respectively. On the other hand no statistically significant reduction in FBG, blood pressure and serum lipids were noted. Furthermore, of the total, 23 were prescribed liraglutide only, while 30 were given OADs along with liraglutide. These two groups were assessed in terms of weight and glycemic level and no significant difference between the groups was observed. The Liraglutide only group showed significant difference in terms of HbA1c while significant differences were noted for weight and

HbA1c in the Liraglutide and OADs group from baseline to follow up. Moreover, no major side effects occurred.

Conclusion: Improvement in glycemic control and significant weight loss was observed. Findings showed that Liraglutide is effective as a mono or combination therapy in the study population and were well tolerated. Though an expensive but effective treatment option in Pakistan.

Keywords: Type 2 diabetes mellitus, Glucagon-like peptide-1 agonist; Liraglutide; glycemic control; weight; efficacy.

M18: Diabetic Foot Ulcer: Pathogenic Bacteria And Their Antimicrobial Susceptibility Pattern In Patients Attending A Tertiary Care Hospital.

Mohammad Sajjad Ali Khan. Northwest General Hospital and Research Centre.

Objective: This study aimed to assess the bacterial profile of infected diabetic foot patients and their antimicrobial susceptibility pattern in a tertiary care hospital. **Study Design:** A prospective cross sectional study.

Materials and Methods: A prospective study was carried out over a period of 6 months in a tertiary care hospital in Peshawar, Pakistan. Demographics and clinical characteristics such as age, sex, type and duration of diabetes, glycemic control, presence of retinopathy, nephropathy, neuropathy, peripheral vascular disease, duration and size of ulcer, clinical outcome, and duration of hospital stay were collected. Pus or discharges from the ulcer base and debrided necrotic tissue were obtained. The specimens were subjected to Gram staining and inoculated on blood agar and MacConkey agar for isolation of bacteria. After 24 hours of incubation at 37°C, the bacterial isolates were identified based on standard bacteriological methods. Antibiotic susceptibility testing was performed by Kirby Bauer's disc diffusion method. **Results:** A total of 200 patients received a diagnosis of diabetic foot ulcer at the hospital during the period of the study. The age of the patients

ranged from 24 to 92 years with the mean age 58.12 year (SD 12.494). The mean value for HbA1c was 9.33% (SD 2.050). The mean duration of Diabetes Mellitus was 12.3 years (SD 6.181). 96 (66.2%) isolates were of gram-negative bacteria while 49 (33.8%) were of gram-positive bacteria. Among the gram negative, *Pseudomonas* spp. was most reported (15.9%) whereas Methicillin Resistant *Streptococcus Aureus* (MRSA) in gram positive bacteria (20.7%). Amikacin was found to be the most effective (45%) in treating diabetic foot ulcers followed by Tineam and Meropenem being equally effective at 44% susceptibility. The highest resistance of the microbes was to the drug trimethoprim (44.5%). **Conclusion:** The pathogens causing diabetic foot ulcers still show sensitivity to many of the routinely used medications. However, resistance is being developed to some of the antibiotics such as Trimethoprim. Therefore, culture of the specimen to identify the causative agent and an adequate knowledge of its susceptibility pattern is critical for the appropriate management of diabetic foot ulcers. **Keywords:** Diabetes complications, Diabetic foot ulcer, Antibiotic sensitivity, Bacterial profile, Pakistan.

M19: Inpatient Assessment of the Neurological Outcome of Acute Stroke Patients Based on the National Institute of Health Stroke Scale (NIHSS).

Mohammad Sajjad Ali Khan. Northwest General Hospital and Research Center.

Objective: Identify the association between stroke severity and the neurological outcome of an acute stroke using the National Institutes of Health stroke scale (NIHSS). **Study Design:** A descriptive cross-sectional study. **Materials and Methods:** A cross-sectional descriptive study was done in the general plus stroke unit of the northwest hospital in Peshawar, KPK during Jan 2022 to July 2022. 400 admitted patients diagnosed

with acute stroke in the past three months were included for NIHSS assessment and were classified as mild, moderate, or severe stroke. After entering all of the data from the collection into SPSS version 16, the information was transferred to an Excel spreadsheet. To further assess the results, the researcher and statistician evaluated all of the cases, radiological findings, and laboratory test data. **Results:** In this cross-sectional descriptive study, 400 individuals ranging from 30 to 90 years of age were divided into two groups: males and females. The survey was conducted by 49% of men and 51% of women. The stroke severity was assessed to be mild in 22% of cases, moderate in 49%, and severe in 29% of patients. As evaluated by the NIHSS, Patients with acute ischemic stroke were divided into four groups depending on their neurological outcomes: those who improved were 160 (40%), those who remained stable were 124 (31%), and those who deteriorated were 52 (13%), and those who died were 64 (16%). Patients with greater triglyceride levels were 88, while those with lower levels were 312. Acute stroke was also detected in 34% of patients with a covid history, 28% of patients who were covid positive, and 38% of patients who were covid free in this investigation. **Conclusion:** According to our findings, the NIHSS is a reliable scale for evaluating patients' neurological outcomes and determining the association between acute stroke severity and cognitive functioning (NIHSS). **Keywords:** Ischemic stroke, NIHSS, covid.

M20 : Prevalence & Antimicrobial Susceptibility of Acinetobacter Species in a Tertiary Care Hospital in Peshawar
Shahzad Ahmad. Northwest General Hospital and Research Center.

Objective: The purpose of this study was to investigate the trend of antimicrobial resistance over a five-year period in a tertiary care hospital in Pakistan. **Study Design:** A retrospective cross-sectional study.

Materials and Methods: A retrospective cross-sectional study regarding occurrence and antimicrobial resistance of Acinetobacter species recovered from clinical specimens that were referred to pathology laboratory of North West General Hospital, Peshawar. The data from 2014-2019 was recorded and analyzed by the laboratory. Socio-demographic characteristics and laboratory record data was analyzed using SPSS Version 25. Chi-square test was applied to see the significance. **Results:** Out of 59483 clinical samples, A. baumannii strains were detected in 114 of them. Majority of the clinical samples were from blood (89.5%) followed by sputum (7.9%), wound swab (1.8%) and bone marrow (0.9%). Acinetobacter baumannii has been found in 52 men (67.53 percent) and 28 women (75.67 percent), with an overall risk of 0.669 times. In 76 men (98.70 percent), Sensitivity for ertapenem (99.1), colistin (96.49) and tigecycline (78.9%) were also observed which indicated the potential viability of these drugs to treat multi drug resistant (MDR) Acinetobacter infections. The male-to-female risk ratio was 0.98 for Colistin and 0.71 for amikacin. **Conclusion:** Increased frequency of multi-drug resistance supports the need for continuous surveillance to determine prevalence and evolution of MDR Acinetobacter species in Pakistan. Colistin, tigecyclines and ertapenem remain the possible line of drugs to treat. **keywords:** Antibiotics resistance, Acinetobacter baumannii, ertapenem, colistin, tigecyclin.

M24: Compliance To Colonoscopy In The Department Of Gastroenterology At Lady Reading Hospital, Peshawar – A Comparative Analysis.
Talha Durrani, Omama Humayun, Awais Naeem, Fahad Naim. Khyber Teaching Hospital.

Objective: Find out social, financial, cultural, and psychological barriers among those patients who finally did not show up for their colonoscopy appointment and, make a

comparative analysis with those who did.

Study Design: Cross-sectional, Descriptive.

Materials and Methods: The cross-sectional study was conducted in Lady Reading Hospital, Peshawar from October 2021 to March 2022, via consecutive sampling.

Results: Out of the 224 patients included, males (48.2%) were more likely to show up for the procedure than females (51.8%). Overall, the most recurring barrier to colonoscopy among both the groups was a lack of knowledge with 116 (51.7%) for both the groups, but especially more for the non-compliant patients (<0.05). Fear of results, fear of complications of the procedure, affordability issues, and preference for alternative treatment options (e.g., Hakeemi) stood out as important differences between the compliant and non-compliant patients. **Conclusion:** There are noticeable hurdles to diagnostic colonoscopy in Pakistan, particularly in Khyber Pakhtunkhwa. For the country's healthcare to be able to overcome these problems, and enter an era where screening-colonoscopy, mass education about medical conditions is imperative. **Keywords:** Colonoscopy, Colon Cancer

M25: Post-Dengue Recurrent Guillain Barre Syndrome (RGS): A Case Report from Pakistan.

Omama Humayun, Awais Naeem, Fahad Naim, Talha Durrani. Khyber Teaching Hospital.

Objective: We present herewith a Dengue Fever case leading to Recurrent Guillain Barre Syndrome (RGS), a rare subset of GBS. **Study Design:** Case Report. **Materials and Methods:** Dengue Fever (DF) is a febrile illness caused by infection with one of four dengue viruses, (DENV) and is often associated with immune-mediated diseases. We present herewith a DF case leading to Recurrent Guillain Barre Syndrome (RGS), a rare subset of GBS. **Results:** Case Presentation: A 16-year-old male presented with ascending paralysis, blurred vision, backache, and low blood pressure. On examination, had

decreased power and areflexia in all four limbs. His NCS and CSF findings were suggestive of GBS, while his auto-immune profile was negative. This was the patient's third episode of GBS, occurring roughly 11 weeks apart each, while the first one occurred 6 weeks after he was diagnosed with Dengue Fever via NS1 IgM serology. The patient was treated with plasmapheresis and regained 5/5 strength and reflexes all three times over 2-3 weeks. **Conclusion:** Dengue Fever can be associated with the manifestation of RGS, a rare subset of GBS that can be treated with plasmapheresis. **Keywords:** Dengue Fever, GBS

M26 : Lymphatico –Venous Malformations Of The Orbit; A Case Series
Tajamul Khan. Northwest School Of Medicine.

Objective: To evaluate demographics, presentation, and outcome of surgical treatment and sclerosants in patients with orbital lymphatico-venous malformations.

Study Design: Case series. **Materials and Methods:** This study is a case series of 12 patients of orbital lymphatico-venous malformations, who were admitted in Khyber Teaching Hospital Peshawar Pakistan from 2007 to 2019. Work up of the patients included a detailed history, ocular examination and orbital imaging (ophthalmic B-scan, CT scan and/ or MRI). All patients underwent orbitotomy and / or intralesional injection of sclerosants. The preoperative and postoperative data until last follow up was analyzed. **Results:** Twelve cases were included in this study, three (25%) were males and nine (75%) females. Mean age of all patients was 6.42 ± 6.21 years. Proptosis was present in 10 patients, ptosis in 01 and upper eyelid swelling in 02 patients. In 6 (50%) proptosis was severe enough to cause exposure keratitis. Nine (75%) patients also had dystopia. Imaging studies (CT Scan and /or MRI) were performed in all cases. In 5 (41.7%) the lesion occupied superomedial part of the orbit, while in others it was

randomly distributed. Treatment offered was, percutaneous aspiration of chocolate cyst under ultrasound guidance with injection Bleomycin in 5 patients and orbitotomy with excision of chocolate cyst in 06 patients, while peroperative Injection Bleomycin, given in 2 patients. Follow up period was 0.5 to 2 years and showed no proptosis in 7 (58.3%), recurrence in 3 (25%), ptosis in 1 (8.3%) and limitation of ocular movements in 1 (8.3%) patient. **Conclusion:** LVMs should be included in the differential diagnosis of sudden onset of proptosis in children. Early orbitotomy and / or sclerotherapy show good results. **Keywords:** Lymphatico-venous malformations, lymphangioma, sclerotherapy.

PAEDIATRICS

P1: Too late to be cooled down. Experience of North West General Hospital with Therapeutic Hypothermia.
Bilal Ahmed Sethi, Saima Noreen, Furqan Ahmad, Saffaf Habib, Muhammad Rafay Khattak Northwest General Hospital.

Objective: Therapeutic hypothermia initiated within 6 hours after birth have shown clinically proven improved neurodevelopment scores in term new-born with moderate to severe hypoxic ischemic encephalopathy. The criteria also include Apgar score Less than 5 at 10 minutes, Gestation >36 weeks and weight >2.5kg. Majority of the infant who would have benefit from therapeutic hypothermia were born at facilities, that do not offer this therapy. The delays in initiation of hypothermia therapy and non-education of the referring pediatrician, only a little number was offered neuroprotection. Majority of late referral had sepsis, severe cerebral oedema and high mortality. **Study Design:** Retrospective review of all cases labelled as moderate to severe Birth Asphyxia at neonatal intensive care unit of Northwest general Hospital, Peshawar.

Materials and Methods: We collected one-year data from 1st September 2021 to 31st August 2022 at neonatal intensive care unit at North West General Hospital, Peshawar. Here, in one year n=61 neonates were received with the diagnosis of moderate to severe HIE. We calculated the numbers, fulfilling the set criteria (age<6 hours, Apgar 5 at 10 minutes, Weight >2.5kg and Gestation >36) for starting Therapeutic hypothermia for neuroprotection on our cooling device. We also calculated the time of arrivals, morbidity and mortality rates of cooling and non-cooling Groups. **Results:** Of the 61 infants with moderate and severe HIE who admitted only 5/61(8%) were eligible for total body cooling. The majority of new born 56/61(91.8%) did not full fill the criteria. They were brought in at 6-24 hours 9.8%(n=6), 24 to 48 hours 29.5%(n=18), 48 to 120 hours 29.5% (n=18) and more than 120 hours 22.9%(n=14). The combined mortality of all the late arrival group was 34% (n=19). The 5 who were eligible for cooling criteria 1(20%) died within 12 hours due to severe sepsis. Out of the remaining 4, one had severe hydrocephalus so cooling was stopped after 8 hours due to this co morbidity. One Patient taken Discharge on will (DOW) after 2 days of cooling. The remaining 2 had good outcome and were discharged home alive with tube feeding. The mortality of the cooled group was 20% (n=1). The incidence of sepsis in non-cooled was 32.1% (n=18), severe cerebral oedema 62.5%(n=35) and other 21.4%(n=12) which included severe pulmonary hypertension were treated conservatively by anticonvulsants, antibiotics. **Conclusion:** We discuss the importance of early identification, and timely referral of infants. In the majority of the non-cooled group carried which the hypothermia treatment could not be initiated due to no fulfilling the criteria. In our five cases one did not fit the criteria of cooling due to severe cerebral malformation. The one who died from a hospital acquired infection based on culture report which grew E-coli only sensitive to Meropenem/Imipenem. One did

not want to continue due to reason unknown. The remaining 2 had good outcome. We conclude that, Lack of Education of timely referral, by the referring pediatrician working in facilities with no body cooling treatments made neuroprotection impossible. The referral should have been timely, not only fulfilling the criteria of cooling, but also keeping the baby free from infections as sepsis was one of the major causes of mortality. We suggest that all pediatrician should be educated about criteria about cooling. This could be done via arranging workshops, distribution on medical education pamphlets and videos. We also recommend that baby should be kept free from infections and passive cooling could be started during the transit period by simple measures. **Keywords:** Hypothermia, Hypoxic ischemic encephalopathy, Therapeutic hypothermia.

P2: Frequency Of Hypernatremia In Dehydration Children Upto 1 Year Of Age At Nwgh,Peshawar

Dr. Maria Himayat Northwest General Hospital.

Objective: The aim of this study is to find out how common hypernatremia is in dehydrated children under the age of one year. Study Design: cross-sectional study.

Materials and Methods: This cross-sectional study was conducted at the Department of Pediatrics, Northwest General Hospital, and Research center Peshawar Pakistan from 12 September 2018 to August 20th, 2019. Approval for data collection was granted from the institutional ethical and research committee of Northwest General hospital and Research center Peshawar. The data collected on a pre-planned questionnaire from pediatric patients up to 1 year of age admitted at the Pediatric department of Northwest General Hospital & RC Hayatabad Peshawar. **Results:** The mean age was 4.28±3.42 years. Age-wise distribution among 100 children was 1-3 months 50(50%) 4-7months 35(35%) 8-12 months 15(15%).

Gender-wise distribution among 100 children Male was 66(66%) and Female was 34(34%). Hypernatremia dehydration among children was 86(86%). There was no significant association between hypernatremia status with gender and age-wise distribution showing P-value (.103) & (.187) respectively.

Conclusion: Infancy hypernatremia dehydration is a medical emergency with high mortality and morbidity rates. For survival and a better prognosis, early detection and adequate care are critical. Diagnosis, on the other hand, is often challenging, and dehydration is often underestimated. It is important to treat the condition carefully.

Keywords: Hypernatremia, Dehydration children, 1 year of age.

P5 Title: Comparison of Nebulized Epinephrine with Intravenous Dexamethasone versus Nebulized Salbutamol in Infants Hospitalized with Acute Bronchiolitis. Sahar Iqbal. Khyber teaching hospital.

Objective: To compare mean change in terms of respiratory rate, oxygen saturation and Respiratory Distress Assessment Index (RDAI) score of nebulized epinephrine with intravenous dexamethasone versus nebulized salbutamol in infants hospitalized with acute bronchiolitis. **Study Design:** Randomized Controlled Trial. **Materials and Methods:** The study was conducted in Pediatric Department, Khyber Teaching Hospital from End of October 2016 to April 2017. Total 332 patients with 166 in group A (nebulized epinephrine with intravenous dexamethasone) and 166 in group B (nebulized salbutamol) were selected using non probability consecutive sampling. Patients 6 weeks to 12 months of age including both male and female with 1st time episode of wheezing, cough, runny nose, with only hyperinflation on CXR were included in the study. Patients with history of similar episode of respiratory distress in the

past, prolonged respiratory distress in newborn period, chronic cardiac/pulmonary illness or having received corticosteroids in any form in the preceding 72 hours were excluded from the study. After approval from hospital ethical and research board, the patients included in the study were directly admitted from the A&E Department or OPD with the diagnosis of bronchiolitis. The purpose, risks and benefits of the study were explained to all included patients, and informed written consent was obtained from all included patients. Participants, selected by nonprobability consecutive sampling, were randomly assigned by lottery method to one of the two study treatments: group A, nebulized 1:1000 dilution epinephrine (0.5 ml/kg subject to a maximum of 2.5 ml with 3 ml saline) plus intravenous dexamethasone, or group B, with nebulized salbutamol (0.15 mg/kg with 2 ml saline). It was administered through a Gt012-100 Nebulizer with Mask driven by 100% oxygen at a rate of 6 liters per minute for five minutes (apart from routine oxygen and intravenous fluids) at 0,30,60 minutes. The parenteral treatment consisted of 1.0 mg of dexamethasone per kilogram of body weight (maximum dose, 10 mg). Rest of management was according to standard protocol. All the infants were assessed in the beginning (baseline) and at 240 minutes for Respiratory Distress Assessment Instrument score (RDAI), respiratory rate (RR), and oxygen saturation. Adverse events during hospitalization were monitored and reported within 24 hours. Data was recorded on a predetermined proforma. Mean \pm SD was calculated for quantitative variables which were RDAI score, respiratory rate and oxygen saturation. Frequency and percentage was used to calculate qualitative variable which was gender. SPSS (version 17) was used to enter and analyze the data. Comparison was made in the mean change between the two groups with respect to RDAI, respiratory rate and oxygen saturation at 240 minutes from baseline. Outcomes (RDAI, respiratory rate and oxygen saturation) in both the groups

were compared by using independent t-test. p value <0.05 was considered as significant.

Results: In this study mean age of the patients in group A was 5.30 ± 2.89 while in group B, mean age was 5.25 ± 3.18 (table 1). Gender distribution among 166 patients in group A was analyzed as 113 (68%) male and 53 (32%) female. While group B, 103 (78%) out of 166 were males and 63 (22%) females (fig 1). At arrival the mean respiratory rate in group A was 73 ± 5.5 and in group B 75 ± 5.8 . The mean oxygen saturation at arrival in group A was analyzed as 91.73 ± 1.84 and in group B 91.61 ± 1.64 . While the RDAI score was 11.45 ± 1.78 in group A and 11.74 ± 1.71 in group B (table 2). Analysis was done of the outcomes at 240 minutes. The respiratory rate in group A was 65 ± 6.3 and in group B was 68 ± 6.3 . The oxygen saturation in group A was 93.58 ± 1.95 and in group B 91.61 ± 1.64 . While the RDAI score was 9.59 ± 1.72 in group A and 10.73 ± 1.66 in group B (table 3). Analysis was done for the mean change in clinical parameters from baseline to 240 minutes. In group A the mean change in respiratory rate was 9 ± 3.0 , while in group B it was 7 ± 2.7 . The mean change in oxygen saturation in group A was 1.99 ± 1.95 and 0.83 ± 0.51 in group B. While the mean change in RDAI score in group A was 1.86 ± 0.58 and 1.04 ± 0.48 in group B. The mean difference was statistically significant only for the RDAI score (table 4). **Conclusion:** Combination therapy of epinephrine with dexamethasone had a more significant response in the clinical score only, and RDAI score was found to be more representative of clinical improvement of patients admitted with acute bronchiolitis. There were no differences in oxygen saturation or respiratory rate outcomes in the studied intervals in both groups ($p>0.05$). **Keywords:** Bronchiolitis, Epinephrine, Steroids, Salbutamol, RDAI.

P6: Frequency Of Thrombocytopenia Among Neonates With Neonatal Sepsis.
Sahar Iqbal. Northwest General Hospital And Research Center.

Objective: To determine the frequency of thrombocytopenia among neonates with sepsis. **Study Design:** Descriptive Cross-Sectional Study. **Materials and Methods:** Study Design: Descriptive Cross-Sectional Study. Study Settings: Department of Pediatrics, North West General Hospital, Peshawar. Study Duration: 6 months 6/9/2019 to 6/3/2020. Sampling Technique: Consecutive (nonprobability) Sampling. **Sample Size:** Sample size was 119 using 95% confidence level and 9% absolute precision using WHO sample size calculations. **Results:** In this study age distribution among 119 children was analyzed as 68(57%) children were in age range 7-15 days while 51(43%) children were in age range 16-28 days. Mean age was 18 days with SD ± 7.87 (Table No1) Gender distribution among 119 children was analyzed as 62(52%) children were male and 57(48%) children were female. (Table No2) Weight distribution among 119 children was analyzed as 84(71%) children had weight ≤ 2.5 Kgs while 35(29%) children had weight > 2.5 Kgs. Mean weight was 2 Kgs with SD ± 1.91 (Table No3) Gestational age among 119 children was analyzed as 87(73%) children had weight ≤ 37 weeks while 32(27%) children had weight > 37 weeks. Mean gestational age was 35 weeks with SD ± 6.818 (Table No4) Maternal diabetes among 119 mothers was analyzed as 21(18%) mothers were diabetic while 98(82%) mothers were not diabetic. (Table No5) Status of pre-eclampsia among 119 mothers was analyzed as 17(14%) mothers had pre-eclampsia while 102(86%) mothers didn't had pre-eclampsia. (Table No 6) Status of eclampsia among 119 mothers was analyzed as 4(3%) mothers had eclampsia while 115(97%) mothers didn't had eclampsia. (Table No7) Frequency of thrombocytopenia among 119 children was analyzed as 55(46%) neonates had thrombocytopenia and 64 (54%) neonates didn't have thrombocytopenia. (Table No 8) Stratification of thrombocytopenia with respect to age, gender, gestational age, weight, maternal DM, eclampsia and pre-eclampsia is given in Table No 9-18.

Conclusion: Thrombocytopenia was found in 46% patients in which 10 (8%) had mild, 32 (27%) had moderate and 13 (11%) had severe thrombocytopenia. **Keywords:** thrombocytopenia, neonates, sepsis.

P9: Hearing loss due to cyclosporine in 13 years old boy with nephrotic syndrome.
Syed Sajid. IKD Peshawar.

Objective: chronic use of cyclosporine led to hearing loss and there was improvement in hearing when drug was discontinued. **Study Design:** case report. **Materials and Methods:** A 13 years old boy known case of steroid resistant nephrotic syndrome taking cyclosporine for last 4 years referred from one private hospital for non-response to treatment and decrease hearing. On detail history it was revealed that hearing loss started after initiation of treatment with cyclosporine during first year and patient was not properly followed for hearing issue. Rather cyclosporine was continued despite no response to treatment. Patient also had raised ALT, uric acid levels. **Results:** Drug was discontinued and on follow up ALT and uric acid normalized. Hearing on follow up improved clinically. **Conclusion:** It was concluded that children taking calcineurin inhibitors should be screened for hearing when taking for long duration. **Keywords:** Hearing loss, nephrotic syndrome, FSGS, cyclosporine

Obstetrics/Gynaecology

Og3: Challenges In Training Faced By Gynecology And Obstetrics Residents During Covid-19 Pandemic

Fauzia Afridi Khyber Teaching Hospital.

Objective: To find out the educational challenges in training faced by post graduate residents in Gynae/ Obs during the 1st wave of Covid-19 pandemic. **Study Design:** Cross-Sectional Study. **Materials and Methods:**

This is cross-sectional study in which online proforma using Google forms were filled by the postgraduate residents of gynecology and obstetrics of the three main teaching hospital of Khyber Pakhtunkhwa i.e.HMC, KTH, LRH over the time period of 1st April 2020- 31st July 2020. The challenges faced and their severity was assessed using a questionnaire based on like scale. **Results:** The mean ages of participants were 28.29 ± 1.781 years. The percentage of trainees in year 1,2,3,4 residency were 19.4%, 26.6%, 22.4%, 26.5% respectively. 60% of were of the opinion that their training lagged behind due to covid crisis. **Conclusion:** There was considerable impact on training of postgraduate resident during the 1st wave of Covid-19 pandemic and online platforms were in adequate to fulfill the deficiency of face-to-face learning. However, this study was undertaken during the first wave of pandemic when online learning platforms were not well established. More studies are needed to be done to assess the utility of distant learning in the current era, as a lot of progress has been made in this regard since the onset of COVID 19 pandemic. **Keywords:** COVID 19 Pandemic, training, post graduate residents, challenges, OBGYN.

Obj 4: Personal and Professional Challenges Faced by Gynecology And Obstetrics Post-Graduate Residents During Covid-19 Pandemic.
Fauzia Afridi Khyber Teaching Hospital.

Objective: To know about the personal and professional challenges faced by the post graduate residents of Gynecology/obstetrics during the first wave of COVID-19 pandemic over the time period of 1st April -30th July 2020. **Study Design:** descriptive cross-sectional study. **Materials and Methods:** A web based Cross-sectional study was conducted among postgraduate Gynae residents in the selected hospitals of Khyber Pakhtunkhwa i.e. KTH, HMC, LRH from 1st April -30th July 2020. **Results:** Mean age of residents was

28 ± 1.78 years, 39% had kids and 10% were pregnant, 40% lived in joint family, 40% contracted covid-19 but most (88.5%) had mild symptoms. 75.5% found spending time and energy on cleansing after returning from hospital, a big challenge. Mental health was significantly affected in more than half (51%) of the residents. The biggest personal fear reported by 87% of participants was that of family getting affected. In addition to lack of PPEs reported by almost half the participants, majority (85.6%) thought that social distancing was not possible due to the nature of work of OBGYN residents. More than half of (54%) of the residents said they were unable to do justice with patient care due to fear of getting infected. **Conclusion:** When a new pandemic erupts, there is a lot of uncertainty regarding its transmissibility, severity and prevention. Also, there is lack of protective equipment due to sudden, unexpected nature of a pandemic. Their impact is more pronounced on healthcare personnel especially post-graduate residents, who have professional obligations in addition to their personal challenges. **Keywords:** COVID-19 Pandemic, challenges, post graduate residents, OBGYN.

Obj6: Burnout amongst doctors of Obsterics and Gynaecology department at Khyber Teaching Hospital during Covid 19 Pandemic.
Dr Maimoona Qadir. Khyber Teaching Hospital.

Objective/Hypothesis: To determine the frequency of burnout amongst doctors of department of Obstetrics and Gynecology in Khyber Teaching Hospital to assess the impact of Covid 19 on their personal and professional lives. **Study Design:** Cross sectional. **Materials and Methods:** This study was conducted in department of Obstetrics and Gynecology Khyber Teaching Hospital Peshawar from April 2020 to May 2021. Structured questionnaire based on Copenhagen burnout inventory was used to collect data. Demographic details, place of

work, designation, years of residency, access to PPE, covid testing, approximate number of Covid patients attended and few questions about those family aspects which were likely to be influenced by covid 19 and contribute to doctor's burnout. Informed consent was added to proforma. **Results:** Results showed inadequate provision of PPE and covid testing, fear of transmission of infection to family, effect on care of elderly at home and increased mood irritability. Personal burnout was 54, work related burnout was 49.6 and patient burnout was 37. **Conclusion/Recommendations:** There is significant family and personal burnout but patient burnout is not present, showing professionalism of our doctors. **Keywords:** Burnout, Covid-19, Pandemic, Gynecology, Obstetrics.

Og13: Relaparotomy after caesarean section: An event of near miss maternal mortality.

Dr Maimoona Qadir. Khyber Teaching Hospital

Objective: To find out risk factors, indications, causes, maternal mortality and morbidity after relaparotomy following caesarean section. **Study Design:** Descriptive cross sectional. **Materials and Methods:** This study was conducted at Gynae department of Mardan Medical Complex from March 2015 to February 2020. All women of any age or parity who had undergone caesarean section for any indication, which was followed by a relaparotomy within a 60 days' time, irrespective of location of primary surgery was included. **Results:** Rate of relaparotomy was 0.25%. 88% subjects were in 20-35 years age group. 61% were multigravidas and 31% were primigravidas. 84.6% were unbooked. 31% were referred from remote areas and private centers, where caesareans had already taken place. Placental abruption was the most common indication (34.6%), followed by previous scars (19%), and placenta previa

(15%). Mean interval between primary surgery and relaparotomy was 13.5+3.2 hours. Indication for relaparotomy was postpartum hemorrhage and intraperitoneal hemorrhage in 34.6%, followed by rectus sheath hematoma and broad ligament hematoma in 7.7% each. 84.6% were admitted in ICU, 65.4% had blood transfusions, 30.7% developed DIC and renal impairment was seen in 19%. Mortality rate was 15.38% and all of them were referred cases. **Conclusion:** Relaparotomy after caesarean section is a high-risk situation. Postoperative vigilance, timely intervention and efficient referral system can reduce both maternal mortality and morbidity. **Keywords:** Caesarean section, Relaparotomy, Obstructed labor, Placental abruption, Placenta previa, Postpartum hemorrhage.

Students Research

St 41: Assessment of nutritional status, dietary patterns, and physical activity regimens among undergraduate medical students.

Salman Zahir, Syed Jamal Nasir. Northwest School of Medicine.

Objective: To assess the nutritional status, dietary patterns, and physical activity regimens of undergraduate medical students at Northwest School of Medicine, Peshawar. **Study Design:** Single-center based Cross-sectional Study. **Materials and Methods:** 1). STUDY DESIGN: Single-center based Cross-sectional Study. 2). STUDY SETTINGS: Northwest School of Medicine. 3). STUDY DURATION: This study was conducted approximately in 6 Months duration (April ,2021-September ,2021). 4). SAMPLE SIZE: A sample size of 218 undergraduate medical students was calculated from a population of 500 undergraduate medical students through

sample size calculator (Open Epi). 5). **SAMPLING TECHNIQUE:** Convenience Sampling technique was applied. 6). **DATA COLLECTION:** Data were gathered via measuring tape, weight scale, and structured questionnaires. 7). **DATA ANALYSIS:** The recorded data were analyzed using descriptive statistics (SPSS V.26). **Results:** A sample set of 218 participants was assessed, in which both male (n=109; 50.0%) and female (n=109; 50.0%) participants participated. The mean age of participants was 21.88 ± 1.465 years, while the mean Body Mass Index was $22.635(\pm 3.7835)$, 29(13.3%) underweight, 141(64.7%) normal, 41(18.8%) overweight, and 7 (3.2%) obese. Dietary analyses revealed that 35.8% preferred carbohydrates, 58.7% preferred proteins, and 5.5% preferred fatty food. Physical activity was assessed on the basis of questions summarized from international physical activity questionnaire, according to which a total of 152 participants had a high level of physical activity, while 66 had a low level. Furthermore, a positive and significant association between physical activity and BMI ($P= 0.049$) ($\chi^2= 7.863$) was also found. **Conclusion:** The overall nutritional status and dietary patterns were satisfactory among medical students of NWSM, and they follow a healthy lifestyle with proper physical activity and a nutritious diet. **Keywords:** Nutritional status, Diet, Physical Activity, Body Mass Index.

St 2 : Perception of undergraduate medical students regarding patient safety during clinical rotations.

Arsalan Khan, Parkha Sethi, Komal Qayyum, Fatima Khan, Ramshaw Khan, M.Ayaz, Maseera Zakir, Maleeha Jamil, Sayed Kumail Hussain, Jalal Uddin, Munsif Ali, Emtiaz Khan, M.Bilal Northwest School of Medicine

Objective: To study the perception and professionalism of undergraduate medical students regarding patient safety during their clinical rotations. **Study Design:** This was a

descriptive cross-sectional single center survey, including all the undergraduate medical students enrolled in Northwest School of Medicine of Peshawar, Khyber Pakhtunkhwa, Pakistan. **Materials and Methods:** Study Settings: This study was conducted in Northwest School of Medicine to evaluate the perception of undergraduate students regarding patient safety. Ethical Considerations and Study Duration: Ethical approval for this survey, was obtained from Institutional Review and Ethics Board (IREB) of Northwest School of Medicine and the affiliated hospitals. Before the start of the questionnaire, a statement was included that students have willingly participated in the survey. Proceeding to fill out the questionnaire was considered as consent obtained. After the acceptance of the proposal by the Institutional Review and Ethics Board (IREB) of NWSM, the data collection was completed in July 2021. Analyses and write up of thesis were completed in September – October 2021. Study Design: This was a descriptive cross-sectional single center survey, including all the undergraduate medical students enrolled in Northwest School of Medicine of Peshawar, Khyber Pakhtunkhwa, Pakistan. Study Population: The study population was all the undergraduate medical students studying in Northwest School of Medicine of Khyber Pakhtunkhwa. Our target population was all the undergraduate medical students. Sample Size and Sampling Technique: Convenience sampling technique was used to collect data from all the 500 undergraduate medical students (census) currently enrolled in the 5-year MBBS program of NWSM. Sample Selection: Inclusion Criteria/ Exclusion Criteria: The inclusion criteria were set as following: Active MBBS students of either gender, currently enrolled in Northwest School of Medicine recognized by Pakistan Medical Commission (PMC) were included in this census. Exclusion Criteria: The exclusion criteria were set as following: i. Those students not willing to participate in the survey were excluded.

Instrumentation/Questionnaire Medical Students Safety Attitudes and Professionalism Survey (MSSAPS) tool, which is a very well-equipped questionnaire, was used to collect data from undergraduate medical students that was modified according to the setting of the study (Stéphanie Larramendy-Magnin et al). Part one of the MSSAPS included the demographic information of the medical students, such as age, gender and year of study etc. The variables in the questionnaire were 28 items measuring 5 divisions that were safety culture, teamwork. culture, experience with professionalism during clinical rotation, error disclosure culture at your hospital and comfort expressing professional concerns. The questionnaire had 5 main components regarding patient safety including, Safety Culture, Teamwork Culture, Experiences with professionalism, Error disclosure culture, and Comfort expressing professional concerns. Each component had a set number of questions evaluating students' patient safety perceptions. It consisted of a total of 25 items with the sub-components divided as follows: Safety Culture: 8 items Teamwork Culture: 5 items Experiences with Professionalism: 6 items Error Disclosure Culture: 4 items Comfort Expressing Professional Concerns: 2 items Participants were instructed to rate each item by using a five-point Likert scale with the following response key: Response Key: 5 = Strongly agree 4 = Agree 3 = Neutral 2 = Disagree 1 = Strongly disagree The maximum score possible for all the items was 120 while the minimum possible score was 25. Data Collection Procedure: After the approval of the research proposal from the IREB, further permission from the administration of NWSM was taken through official permission letter for commencement of data collection. Before data collection, proper permission was taken from the head of departments in order to conduct the study. All the willing students were briefed about the purpose and procedure of the study and then informed consent was taken

from them. The students who agreed were screened through inclusion and exclusion criteria. Data was collected by using a standard questionnaire. Every student was free to ask any kind of help while filling the questionnaire. Data Analysis Procedure: The data was analyzed by using SPSS (Statistical Package for Social Sciences) version 24. Percentages of demographic variables were obtained that included categorical data e.g., gender of the students and year of study etc. These demographic variables were analyzed by the descriptive statistics in SPSS and their frequency tables were generated. The mean scores and standard deviations of the students' attitude and perception and professionalism towards patient safety were obtained and then compared through independent sample t-test when it was two categorical variables such as gender while Analysis of Variance (ANOVA) was used when the variables were 3 or more that is when the means of the score obtained by each year of study were compared. **Results:** Results: The mean score of students was high (90.12 + 10.31), regarding their perception of patient safety. Comparison of knowledge scores between male and female students showed a slightly higher mean score [90.40(SD 9.996)] for females compared to male students mean [89.86.(10.629)] but not statistically significant. Moreover, there was no significant difference between year of study of students in their perception of patient safety. Mean score of safety culture was [31.01(SD4.138)] which was the highest followed by [19.98(SD5.345)] for professionalism, [18.89(SD2.996)] team culture and lowest for error disclosure that was [12.75(SD2.995)]. **Conclusion:** Our results show that the participants have a keen understanding of patient safety and also are practicing it to a certain extent. To still improve its role further, we emphasize on the point that patient safety should be made an integral part of the undergraduate medical curriculum, and job training as it will not only benefit future doctors but will be something that will prevent the patients

from unnecessary harm through medical errors. **Keywords:** Patient Safety, Undergraduate Medical Students, Professionalism, Safety Culture, Teamwork culture, Error Disclosure.

St 8 : Knowledge, Attitude and Practice survey of home management of diarrhea in children under 5 years of age visiting tertiary care hospital by their mothers.

Khansa Khan, Hena Hanif, Huzaifa Younus, Huma Khan, Wafa Khan, Kinat khan, Junaid Khan, Jawad Ahmad, Ijaz Ahmad, Ina mullah, Kashif Amin, Kanshna, Kamran Sarwar, Jairal Rehan, Ihtisham-ul-Haq. Northwest School of Medicine.

Objective: Our study objectives were to understand the mother's knowledge, attitude, and practice concerning home-management of diarrhea in their children under 5 years and the factors affecting mother's knowledge, attitude, and practice in home-management of diarrhea. **Study Design:** Our study design is Cross-Sectional, Analytical. **Materials and Methods:** Our sample size was 246. Data was collected through a self-structured questionnaire by nonprobability, Convenient Sampling technique. Data was then analyzed by SPSS version-26.0. Means and Frequencies were calculated. The chi-square test was done to determine the association between our dependent and independent variables. **Results:** Our results showed that out of 246, 66.26% of the mothers had good knowledge, 33.74% had poor knowledge, 73% of the mothers had good attitude while 26.8% had poor attitude whereas 75.6% of mothers had good practices and 24.39% had poor practice to manage diarrhea at home. No significant statistical association were observed when attitude of mothers was compared to their age, education and monthly income. Significant statistical association was observed with their residence (P-value = 0.037). Mothers living in urban area had better attitude compared to mothers in rural areas. Regarding mothers' occupation (P-

value = 0.016), working mothers had better attitude than mothers that were housewives. Concerning vaccination of child against Rota virus (P-value = 0.00), majority of mothers had good attitude. No significant association were observed when practices of mother were compared to residence, education and occupation of mothers but significant statistical association were observed concerning their monthly house income (P-value = 0.041). Majority of mothers with income less than PKR 50,000 had good practice than the other mothers. Relating to vaccination against Rota virus (P-value = 0.005), majority of mothers had good practice of vaccinating their child than mothers who had poor practice. **Conclusion:** Based on the results of our study, we can say that the majority of mothers were knowledgeable, had a positive attitude, and used good practices when it came to home management of diarrhea in their children. **Keywords:** Knowledge Attitude, Practice, Diarrhea, ORS.

St 11: Detection of ferritin levels among infected Covid-19 patients in District Islamabad.

Yasmin Khan, Kashaf Javed. Prime Institute of Health Sciences.

Objective: Coronavirus disease (Covid-19) emerged world wide by 2019 since the influenza this is fi h pandemic. The first alert and then outbreak of a numerous case of human pneumonia in Wuhan, China since last December 2019 was observed. The earliest date for a sign to appear is December 1,2019. These patient's symptoms including fever, dry cough and dyspepsia were diagnosed with viral pneumonia. **Study Design:** reports-based results. **Materials and Methods:** Study duration was of 3 months and sample size were 100. The blood sample were collected aseptically in Lithium Heparin. Real time polymerase chain reaction (RT-PCR) technique used to conform the diagnosis of COVID-19 and ELISA technique

used to measure the ferritin level, but PCR is a time consuming, economical and difficult. Results: The results showed that ferritin level was high in 87% COVID-19 positive patient and ferritin level was normal in 13% COVID-19 positive patients. The normal and abnormal ferritin level was found in all age groups but in the age group (41-60) most patients were found with the abnormal ferritin level. The ferritin level can vary in both male and female COVID-19 positive patients but the result showed that in among 100 COVID-19 positive patients 62 were male and 38 were females. Ferritin level was abnormal in 55 COVID-19 positive male patients and was normal in 08 COVID-19 positive male patients while in 32 COVID-19 positive female patients ferritin level was abnormal and in 06 COVID-19 positive female patients ferritin level was normal. **Conclusion:** As increase in inflammatory marker ferritin correlate with disease severity, regular monitoring by using the parameter of ferritin could be used as significant prognostic factors of the disease outcome. **Keywords:** covid 19, Islamabad.

St 12 : Bacteriological analysis of Drinking water in Islamabad.

Kashaf, M Amir. Prime institute of Health Sciences.

Objective: This study was designed to identify drinking water pathogens and fecal contamination to prevent from water-borne diseases spreading in the area. **Study Design:** samples were taken. **Materials and Methods:** This was a descriptive-analytical study including 50 samples were taken from groundwater, filtration plants, tanker water and water supplies in sectors G15, H15 and Islamabad Homes Phase II of Islamabad Capital Territory (ICT) Pakistan. Stratified sampling included 28 water samples from Groundwater (tube well), 2 from the Filter Plant, 10 from tankers and 10 from the water supply of G15, H15 and Islamabad homes phase 2 for total heterotrophic bacterial count (THBC) by spread plate count method,

total coliform (TC), and fecal coliform including *Escherichia coli* by most probable number technique along with physicochemical analysis. Two filtration plants are present in G15 and there is no FP in H15 but there are many TW, bores in H15. People mostly use groundwater in H15. G15 has a CDA water supply from Khanpur Dam. We did Physicochemical and Bacteriological analysis on samples and checked water quality. This study took 3 months. **Results:** The result showed that 23(46%) out of 50 were contaminated. In total heterotrophic bacterial count (THBC) 23 out of 50 samples were positive. Tanker water samples have highest THB count with the value of 4,540 CFU/ml with an average log₁₀ value of 2.32. All the water samples were found physicochemical acceptable. In total coliform test, 25 samples were positive and 21 samples were positive in fecal coli and *E.coli* tests. **Conclusion:** According to this study 46% of the water sources of G15, H15 and IHP2 did no longer meet the secure limits for drinking water as described inside the WHO suggestions. The excessive THBCs obtained from tanker water indicate that people utilizing tanker water directly are more exposed to contamination. The groundwater of H15 was found more contaminated compared to groundwater of G15. **Keywords:** Bacteriological, analysis, Drinking water.

St 13: Prevalence and antimicrobial susceptibility pattern of *Escherichia coli* among urinary tract infected patients in different hospitals of twin cities.

Kashaf, Junaid Jameel, Awais, Zakaria, NajeebUllah, Mahnoor Nadeem. Primer institute of Health Sciences.

Objective: The aim of this study was to determine pattern of sensitivity to antibiotics of *E. coli* isolated from UTI patients and its prevalence. **Study Design:** Questionnaire based. **Materials and Methods:** Midstream

urine samples were collected from 250 to 300 symptomatic patients. Urine specimens were cultured on cystine-lactose-electrolyte-deficient (CLED) agar. *Escherichia coli* was identified on the basis of morphology, Gram staining and analytical profile index (API) tests. Then Antibiotic sensitivity pattern was determined by Kirby-Bauer's disk diffusion method. **Results:** It was observed that *E. coli* was more resistant towards those antibiotics which were used to be sensitive in previous days. The prevalence of *E.coli* in females was greater i.e, 65% as compared to males which was 35%. Among two age groups (18-35yrs & 36-50yrs) *E.coli* was more prevalent among patients of group 2 (36-50yrs) with percentage of 52%. According to results the antibiotic against which *E.coli* has shown significant resistance was Ampicillin 88%, followed by Augmentin 70% and cefixime 67% resistant towards *E.coli*. On the other hand Amikacin 99%, Meropenem 96% and Tazobactam 95% had shown tremendous sensitivity to isolated *E.coli*. **Conclusion:** Increase in resistance against different antibiotics will be observed. The given data will help physician in empirical therapy and also limit the use of resistant drugs. The present study suggests that females are highly susceptible to UTI in both community and hospital settings as well as the occurrence of *E. coli* were also found high in female patients. *E. coli* showed resistance against commonly prescribed antibiotics. **Keywords:** Prevalence, antimicrobial susceptibility, *Escherichia coli*, urinary tract infected.

St 14: Frequency of Iodinated Contrast Reactions in Patient Undergoing CT scans in the Vicinity of Islamabad and Rawalpindi.

Kashaf, Aniq Anwar, Maham Nabeela, Sajjad Ahmad, Attia Bano. Prime institute of Health Sciences.

Objective: The purpose of our study was to investigate the frequency of contrast

reactions in patients Contrast-enhanced CT scans with Non-Ionic Low Osmolar Iodinated Contrast Media (LOCM). **Study Design:** questionnaire based. **Materials and Methods:** A Retrospective cross sectional observational study was performed. Sample size for this study was 250 patients to evaluate the contrast reaction. The study was conducted in Radiology Department of different hospitals in the vicinity of Islamabad and Rawalpindi. Simple random sampling technique was used for this study and data was collected via Questionnaire. Low Osmolar Contrast Media (LOCM) was used as contrast agent with high concentration of 100mg/mL and low concentration of 50mg/mL Via Intravenous (IV) administration. Data was analyzed using SPSS version 26. Mean, descriptive and correlation analysis was performed. **Results:** A total 250 patients were examined using Non-Ionic Iodinated Contrast media. Out of 250 patients, 106 (42.5%) were male and 144 (57.5%) were females. Adverse Contrast reaction was reported in 96 (38.4%) patients. Among these 96 patients 64 (26.2%) patients show mild contrast reaction while 32 (12.8%) patients show moderate reaction while 154 patients did not show any contrast reaction. Adverse Contrast reaction among cases of different clinical history identified were itching in 13 (5.2%) patients, headache in 6 (2.4%) patients, nausea in 13 (5.2%) patients, vomiting in 13 (5.2%) patients, dizziness in 6 (2.4%) patients and Shortness of breath in 13 (5.2%) patients. For the age wise distribution of contrast reaction 63 (25%) were at the age of 18-25 years, 56 (22.5%) were at the age group of 26-35 years, 38 (15.0%) were at the age group of 36-45 years and 94 (37.5%) were at the age group of 46-55 years. The marital status of patients out of 250 patients was 181 (38.4%) were married while 69 (27.6%) were single. **Conclusion:** Rapid recognition of the signs and presentations of a contrast reaction allows Radiology personnel to identify the type of reaction which in turn facilitates rapid treatment and reversal of the contrast reaction. It helps to

promote awareness among people regarding Contrast Enhanced CT scans. **Keywords:** Frequency, Iodinated Contrast Reactions, CT scans.

St 15 : A Comparative Study of Fatty Liver Disease Through Ultrasonography.

Kashaf Javed, Wakil Zada, Amjad khan, Rizwan Ullah, Sudhir Ahmed, Yasmin Khan. Prime Institute of Health Sciences.

Objective: The principal methods used for diagnosing NAFLD include imaging, liver biopsy and abdominal ultrasonography. These methods consist of looking for changes in fatty liver too. The proper treatment for NAFLD is not known yet but some measures can be adopted to limit its main causes which can be gotten rid of using anti-obesity medicines, improving eating habits and exercise. **Study Design:** ultrasonic reports analysis. **Materials and Methods:** This comparative study was conducted among the males and females of twin cities (Islamabad and Rawalpindi Hospitals) via Ultrasonography report. Total 250 participants were included. Out of the total participants, 175 (87.5 %) were diagnosed with NAFLD while, 75 (12.5 %) had this disease in their family. Approximately 43.47 % of the total participants were aware of NAFLD. Maximum participants who were aware of NAFLD were educated background. **Results:** Results were concluded on the basis of Ultrasonography reports among males and females in their selected age groups from 18-28, 29-39 & 39-above. In which the most affected age found was above 35 years whereas least affected one was below 28 years. **Conclusion:** The accessibility, ease of use, and low-side effect profile of ultrasound make bedside ultrasound an appealing imaging modality in the detection of hepatic steatosis. When used with appropriate clinical risk factors and steatosis involves greater than 33% of the liver, ultrasound can reliably diagnose NAFLD. **Keywords:**

Comparative Study, Fatty Liver Disease, Ultrasonography.

St 16: Evaluation of Radiation Hazards among the Health Care Professionals of Twin Cities.

Kashaf Javed, Basharat Bashir, Mudassir Riaz, M. Abdullah, Umer Zia, Mayra Nazir. Prime Institute of Health Sciences.

Objective: To evaluate the radiation hazards among health care professionals working in radiology department. Another main objective was to assess the knowledge of radiation hazards and radiation protection practices of health care professionals. **Study Design:** Questionnaire based interview based. **Materials and Methods:** An observational study was based on a close ended questionnaire survey that will carried out among health care professionals working in radiology department in different hospital of twin cities. Sample size of 200 people working in different modalities were invited to participate in the study. Age range targeted was from 18 to 50 years. **Results:** Total sample size of 200 potential participated in this study, out of which 50 participants were contacted via email to participate the survey. The average age of participants was 18 to 28 years (75%) of whom were male and (58.3+39.6) was female. The majority of participants were Technicians/Technologists (58.3%) and their work duration was 2 to 5 years (35.4%) was most effected by radiation hazards. Technicians /Technologists (58.3%) working in Radiography was at high risk and mostly affected by radiation hazards (37.5%). The average participants (79.2%) were found to have good knowledge of the risk and safety measures associated with radiation hazards. **Conclusion:** This study demonstrated poor radiation protection practices despite good knowledge of radiation hazards among the participants, but radiation exposure and prevalence of radiation hazards were found.

Keywords: Radiation Hazards, Health Care Professionals, Twin Cities.

St 17: Comparison of Postpartum Depression After Cesarean Section vs Normal Delivery.

Kashaf, Basit Khan, Atta-Ur-Rehman, Mamoon Azam, Amir Zeb, Najia. Prime Institute of Health Sciences.

Objective: The aim and objective of this study is to compare postpartum depression after cesarean section vs normal delivery. **Study Design:** Questionnaire based Tabular results have been compiled and mentioned on poster. **Materials and Methods:** It is an observational cross-sectional study in which the data is being collected from the gynecology and obstetrics OPD through Edinburgh Postpartum Depression scale. The questionnaire consists of 10 questions where women are asked to answer each question in term of the past seven days. The collected data is being entered and analyzed in SPSS. **Results:** This study will demonstrate the risks of developing postpartum depression in relation with mode of delivery which is cesarean section and SVD. **Conclusion:** Mode of delivery constitutes a high-risk group for postpartum depression. **Keywords:** Postpartum Depression, Cesarean Section, Normal Delivery.

St 18: Comparative study of preoperative anxiety among adult surgical patients associated with gender educational level and preoperative information.

Kashaf Javed, M. Tayyab Siddiqui, Zeeshan Alam, Noor Hamid. Prime institute of Health Sciences.

Objective: Our primary aim was to investigate the patient psychology during the initial surgical period through different suitable ways. A Comparative study was designed to give evidence on prevalence of pre-operative anxiety among surgical patients. The aim and purpose was to assess pre-operative anxiety and factors among

adult surgical patients to reduce surgical and anesthetic pre-operative morbidity and mortality. The main aim was to aware patient about the drawbacks of anxiety that how much dangerous situation will be if the patient thinks negative so preoperative counseling is necessary before surgical procedure. **Study Design:** Both pictures and tables will be presented on poster. **Materials and Methods:** Selected sample size was of 250 patients in which 125 elective cases of 63 females and 62 males and 125 emergency cases of 63 males and 62 females scheduled for surgery using a systematic random sampling technique from the twin cities. The data was collected by using the Hamilton anxiety scale. **Results:** Overall, our calculated result show high level of anxiety in emergency cases, especially in females because Hamilton grading of females was mostly severe and extremely severe in both elective and emergency cases the anxiety level of females was slightly higher than males. **Conclusion:** There is a high prevalence of anxiety followed by stress and depression among the purposive sample of pre-operative surgical patients. The level of preoperative anxiety was found significantly associated with gender, age and educational level. This study demonstrated that 30.1% of patients had high preoperative anxiety, with fear of pain after surgery being the most common factor related to anxiety on the day of surgery. **Keywords:** anxiety, adult, gender, educational level, preoperative information.

St 19 : Association of anemia with dietary pattern in pregnant women QHAMC Nowshera.

Muhammad Usman Naeem. Nowshera Medical College.

Objective: To determine the association of anemia with dietary pattern. **Study Design:** A cross-sectional study was performed on total of 150 pregnant women visiting Gynecology OPD in QHAMC, Nowshera. **Materials and Methods:** A cross-sectional study was performed on total of 150 pregnant women

visiting Gynecology OPD in QHMC, Nowshera. A detailed proforma was made to assess the dietary patterns from the respondents. Our cut o value for anemia was $\leq 10\text{mmHb}$ and Normal was $>10\text{mmHb}$. **Results:** Results has showed that 62.7% of the studied population are Anemic. Among the participants 21.3% had a change of eating habit; 16.6% were taking meat on a weekly bases; 24.6% were taking dairy products daily; 20.6% were taking fruits daily and only 58.0% were eating vegetables on a daily basis. **Conclusion:** Anemia showed moderate to high prevalence among the pregnant women. Thus, proper Maternal and Child Health Care services should be provided to reduce the burden of Anemia. **Keywords:** Anemia, Dietary Pattern, Eating Habits, dairy Product, Vegetable, Fruit, Meat, Pregnant Women.

St 21: Frequency and its association with risk factor of anemia in pregnant women visiting QHMC Nowshera.

Muhammad Usman Naeem. Nowshera Medical College.

Objective: To determine Anemia Frequency and its association with risk factor. **Study Design:** A cross-sectional study was performed on total of 150 pregnant women visiting Gynecology OPD in QHMC, Nowshera from May of 2022 till June of 2022. **Materials and Methods:** A cross-sectional study was performed on total of 150 pregnant women visiting Gynecology OPD in QHMC, Nowshera from May of 2022 till June of 2022. A detailed proforma was made to assess the determinants of Anemia from the respondents. Our cut o value for anemia was $\leq 10\text{mmHb}$ and Normal was $>10\text{mmHb}$. **Results:** Results has showed that 62.7% of the studied population are Anemic. Among the participants; 20% were educated; 13.3% were in between of 25-35 of age; 30.6% were in Third trimester; 9.3% were overweight; 36.6% had one miscarriage and 2% had suffered from chronic disease.

Conclusion: Anemia showed moderate to high prevalence among the pregnant women along with relationship with chronic disease and miscarriage. Thus, proper Maternal and Child Health Care services should be provided to reduce the burden of Anemia. **Keywords:** Anemia, Chronic Disease, Miscarriages, Trimester, BMI, Age, Education.

St 24 : Assessing the mental health status and sleep quality among house officers in Peshawar.

Abdul Moez, Aleena Ahmad, Adam Khan, Ayesha Ayub, Abuzar, Aiman Zahir. Northwest School of Medicine.

Objective: The objectives were to assess the mental health and the sleep quality of house o icers, besides, between gender and hospital status, and a correlation between the health and sleep quality. **Study Design:** cross sectional study. **Materials and Methods:** A cross sectional study was conducted in 4 tertiary care hospitals. Pittsburgh Sleep Quality Index (PSQI) [4] scale was used for assessing the sleep quality and Warwick Edinburgh Mental Wellbeing Scale (WEMWBS) [3] for assessing the mental health of the respondent's study setting 4 tertiary care hospitals study duration 5 months, sample size 276. **Results:** Among the 276-house o icers, the mean mental health score was 48.13 ± 9.17 , and mean sleep quality score was 6.39 ± 3.27 . In comparison, female House o icers had poor mental health status (female: 45.72 ± 9.32 , male: 49.83 ± 8.70 , $p < 0.05$) and sleep quality (female: 6.91 ± 3.77 , male: 6.03 ± 2.82 , $p < 0.05$). The hospital status showed no association between sleep quality (p value: 0.778) and mental health score (p value: 0.573). Furthermore, quality of sleep had a positive correlation with mental health status of house o icers ($p < 0.01$). **Conclusion:** The overall mental health and sleep quality of house o icers was poor. Female HOs had poor mental health and sleep quality

compared to males. No significant difference exists between the mental health status and quality of sleep in public and private settings. However, HOs having a poor sleep quality also had poor mental health showing a positive correlation between the two factors. **Keywords:** Mental health, Sleep quality, Depression, Anxiety, Sleep deprivation, public hospitals, Private hospitals.

St 25: Prevalence of panic attacks in MBBS students in Khyber medical college, Ayub medical college, Nowshera medical college, Rehman medical college, Northwest school of medicine and Frontier medical college. Tasheen Salahuddin. Nowshera Medical College.

Objective: To estimate the prevalence of panic attacks amongst medical students of 6 selected medical colleges of KPK by gender, habitation, institution, year of undergraduate study in MBBS and their most common triggers and coping strategies. **Study Design:** Descriptive study with a cross sectional approach. **Materials and Methods:** A cross-sectional survey was accomplished using a questionnaire for the assessment of panic attacks among 1427 medical students of 6 selected medical colleges of KPK specifically within the locality of Nowshera, Peshawar and Abbottabad. The study was carried out over all 5 years of MBBS students. **Results:** The results showed that out of the 1427, 54.4% of the medical students experienced a panic attack. Out of the 725 males 47.6% experienced a panic attack. Out of the 702 females 61.4% experienced a panic attack. Out of the 480 days scholars 55.0%-day scholars experienced at least one panic attack. Out of the 947 54.1% hostelites experienced a panic attack. Year-wise, the prevalence being 59.3% in 1st year, 2nd year 55.9%, 3rd year 54.6%, 4th year 52.4% and final year 49.2%. **Conclusion:** Panic attacks showed an unexpectedly high prevalence amongst medical students in KPK with the

females being the most prone demographic. This study highlights the impending importance of devising strategies to treat mental health problems. **Keywords:** Panic attacks, MBBS students, Mental Health Problems, KPK.

St 27: A Giant Recurrent Translocation Renal Cell Carcinoma: Case Report Hafsa Khan. Khyber girls medical college.

Objective: To present a case report of rare, giant recurrent Translocation RCC presented to IKD/HMC Peshawar. **Study Design:** Case report. **Materials and Methods:** This is a case report conducted in the department of Urology IKD/HMC from 10 June_15 August 2022. The data was recorded with pictures and structured Performa. **Results:** A case report conducted in the department of Urology IKD/HMC from 10 June_15 August 2022. **Conclusion:** Translocation RCC is a very rare variant of RCC. Recurrence of renal tumour although a rare entity yet is challenging for urologists and need a multidisciplinary team for management. Tumour stage, grade and Ki67 overexpression are poor prognostic indicators for recurrence. **Keywords:** Giant Renal tumour Translocation Renal Cell Carcinoma Radical Nephrectomy Recurrence.

St 33: Perception of undergraduate nursing students regarding research. Hassan Karim. Rehman College of Nursing.

Objective: To assess the perception of undergraduate nursing students regarding research. **Study Design:** Cross-sectional descriptive study. **Materials and Methods:** A quantitative, cross-sectional descriptive study was carried out among undergraduate nursing students (n= 131) at two colleges. The convenient sampling technique was adopted with a margin error of 5% and a

confidence interval of 95%. Data was collected by distributing a questionnaire in the participants with their own consent. **Results:** The findings of the study revealed that majority of the nursing students responded that research is useful to their profession and they had an overall positive perception towards research. While the response of the participants towards research anxiety domain was that most of them ($n=88$, 67.2) expressed that research is a complex subject, stressful and difficulty to understand arithmetic research. **Conclusion:** Most of the participants agreed that research at this level is useful and it may have a good impact on evidence-based practice. It is recommended to the nursing administrator and educators to implement research-related workshops from the first year of undergraduate degree, as it is beneficial for future nursing students and it improves evidence-based practice. **Keywords:** perception, nursing students, nursing research.

St 34: Assessing intense physical activity among smokers using smart watch an Analytical cross-sectional study.

Sabar Jamila, Sabar Mina. Sarhad institute of allied health sciences.

Objective: To evaluate the physiological responses such as heart rate HR with respect to intense physical activity among smokers and non-smokers. **Study Design:** Analytical cross-sectional study. **Materials and Methods:** 30 sample size was calculated with infinite sample equation i.e., Subjects were recruited from the DPT department of Sarhad university. Snowball techniques was used to recruit the smokers. 30 male students were recruited among these 15 were smoker and 15 were non-smokers. physiological measures were taken using smart watch and assessment was done by performing six-minute walk distance, Blake treadmill protocol and Ekblom-bak test.

Perceived respiratory exertion was evaluated using Borg CR 10 scale was evaluated using Borg CR 10 scale Data analysis was completed through IBM SPSS. **Results:** According to this study, during six minute walk distance, the heart rate of smokers and non-smokers had no significant difference i.e., 82.0 ± 18.0 and 90.7 ± 10.9 respectively and the p value is 0.124, but the total distance covered by smokers was less as compare to non-smokers. the Heart rate was significantly less among smokers during Blake treadmill and Ekblom-bak protocol, the p values for both activities are 0.002 and 0.000 respectively. Moreover, the smokers showed high fatigue index during the Ekblom-bak protocol. **Conclusion:** In short, Heart rate of smokers was considerably low and smokers had high fatigue index as compare to non-smokers indicating that smoking gradually affects the cardiovascular fitness. Further studies are needed to be conducted on the physiological changes of female smokers and in contrast to the male smokers. Age and gender comparison of smokers needs further research. The extent to which the smokers are predispose to the cardiovascular diseases needs to be identify. **Keywords:** Smoking, Physical Activity, Smart watch, Heart Rate, Cardiovascular system.

St 35: Knowledge and hesitancy about mammography services among women in Peshawar: Pakistan.

Arsal Sharif. Pak International Medical College.

Objective: The objective of this study is to determine the knowledge and hesitancy regarding mammography among women in Peshawar. **Study Design:** Cross Sectional Study. **Materials and Methods:** This cross-sectional study was conducted in Peshawar from March to May 2022. Data of 400 women, aged 40-60 years was collected through a validated structured questionnaire via non-probability convenient sampling and

was analyzed through SPSS version 20. **Results:** 400 women of mean age 44.5 ± 1.068 yrs participated. 50.5% participants had heard about mammography, out of these 17% had a family history of breast cancer; however, 92% knew it was a screening tool. 39% had no idea of mammography. Reported aspects of hesitancy were: embarrassment (56%), high cost (52.6%), unavailability of a female technician (50.3%), not feeling confident enough to talk about symptoms (43.1%). Only 31.2% (53 out of 170) of the illiterate public has knowledge of mammography. **Conclusion:** Women of Peshawar have an average knowledge of mammography with low level among uneducated women. Looking at all aspects of constraints that hold women back from performing mammograms and evaluating the barriers that keeps mammography rates low, there is a dire need to delve into this issue and find solutions. On the administrative level, government needs to prioritize the importance of mammograms and lower its costs for general public. Breast cancer awareness programs need special attention and devotion. Moreover, WHO needs to keep Pakistan in limelight for its highly rising breast cancer rates through WHO Global Breast Cancer Initiative. **Keywords:** Knowledge and hesitancy, mammography services, breast cancer, cancer screening.

St 37: Knowledge, Attitude, And Practice of Traffic Rules and Regulations Among Taxi Drivers of Peshawar, Pakistan.

Ammad Saeed, Ashraf Khan, Azmat, Ibrar, Bakhtawar, Asma Shah, Sumran Nadir Khan, Hasnain, Emad Khan. Northwest School of Medicine.

Objective: To determine 1). Knowledge, Attitudes, and Practice of taxi drivers towards traffic rules and regulations. 2). The relationship between demographic features and knowledge, attitudes, and practice of taxi drivers towards traffic regulations. **Study**

Design: A descriptive cross-sectional study.

Materials and Methods: Study was conducted among 226 taxi drivers of Peshawar. Non-randomized convenient sampling technique was applied. Data were gathered via structured questionnaires and were analyzed through SPSS (V.26) so ware.

Results: Among total participants, 108(47.8%) participants had excellent knowledge (Mean =6.25) about traffic rules and regulations, while 160(70.8%) had safe practices (Mean =6.95) and 115(50.9%) had a positive attitude (Mean =6.23) toward traffic rules and regulations. 73.5% of participants responded that they don't use the seat belt. The 87/174 drivers from urban residency had excellent knowledge, 94/174 had a positive attitude, and 123/174 had safe practices about traffic rules and regulations.

Conclusion: In our study many taxi drivers in Peshawar surprisingly had adequate knowledge, positive attitudes and less risky practices towards traffic rules and regulations. Majority of the participants reported that they do not wear seat belt while driving which is alarming and can lead to serious loss of driver if got involved in any accident. Drivers' knowledge was significantly related to their education level. Implementation of programs that helps to encourage education among taxi drivers may increase the taxi drivers' knowledge, attitudes, and practices towards traffic regulations. **Keywords:** Knowledge, Attitude, Practice, Traffic Rules, Taxi Drivers.

Surgery and Allied

S1: Resection of Giant recurrent Liposarcoma of the chest wall with reconstruction. A surgical challenge! Mr Manzar Abbas. Aga Khan University, Karachi.

Objective: We are presenting a case of locally recurring giant liposarcoma which underwent excision thrice in a short period

of three months. The rate of growth was exponential after each excision. Multidisciplinary approach involving thoracic surgeons, plastic surgeons and oncologists is recommended to avoid chances of recurrence in these kinds of tumors. **Study Design:** Case Report. **Materials and Methods:** Case report. **Results:** The patient remained stable after three days of surgery. He was discharged home after three days. **Conclusion:** Giant Liposarcomas are rare presentation of soft tissue tumors. They have high recurrence specially in cases with minimal resection margins, and the exact cause of this behavior is unknown. Multidisciplinary approach involving thoracic surgeons, oncologists and plastic surgeons should be adopted for the management of these kind of tumors. The role of adjuvant chemotherapy and radiotherapy is still controversial in the literature. **Keywords:** recurrent liposarcoma; giant liposarcoma; surgical challenge.

S3: The imposter syndrome in surgical residents.

Muhammad Zeb, Sabir Khan Khattak.HMC Peshawar.

Objective: The purpose of this study is to find out prevalence of imposter syndrome among the surgical residents of KPK. **Study Design:** Web based single blinded survey was conducted among surgical resident of KPK after informed consents. Clance Imposter Phenomenon scale was used as questionnaire. **Materials and Methods:** Demographic and Clance Imposter Scale Questionnaire web-based pilot study was conducted among all surgical residents of KPK, Pakistan in May 2022. 156 residents responded. Sampling technique was convenient nonprobability type. After verbal informed consent all the residents were briefly introduced to the study and were asked to complete the anonymous self-administered printed questionnaires. Clance Imposter Scale (CIPS) was used to find out

the prevalence and degree of severity of imposterism. **Results:** Of the respondents, 104 were men (66.7%) and 52 were female (33.3%). The mean CIPS score among all residents was 55.51. 18 residents (11.5%) obtained a score between 0 and 40 (none to mild imposterism). Moderate imposterism (CIPS score 41 to 60) was seen in 51.9% of respondents (n = 81) and 57 (36.5%) respondents reporting severe (CIPS score 61 to 80) or intense (CIPS score 81 to 100) imposterism. The mean CIPS score among male was 53.79 (SD 11.764) compared to female which was 58.94 (SD of 12.129) with p value of =0.012 both falling in range of moderate imposter syndrome. Among Postgraduate resident no significant differences in CIPS score by year was found (p value = .291). **Conclusion:** Our study concluded that imposter syndrome was highly prevalent among surgical resident i.e. 88.5% falling in range of either moderate, severe, or intense imposterism. Prevalence among female residents was more compared to male residents. Year of training didn't have any impact on grades of imposterism. **Keywords:** Surgical Residents, Imposterism, cips.

S11: Analysis of the diagnostic algorithm for predicting malignancy in thyroid nodules. Taryaba Ayaz. Khyber Teaching Hospital.

Objective: The objective of this study was to assess the sequential contribution of each diagnostic technique in the algorithm for predicting malignancy in thyroid nodules. **Study Design:** Retrospective study. **Materials and Methods:** This retrospective study was done on 137 patients who had dominant nodules and underwent excision. Clinical factors were used to formulate a baseline regression model to predict malignancy. In a periodic fashion, the 2015 ATA ultrasound risk stratification, Bethesda classification, and molecular profiling were added to the model. The likelihood ratio test was used to assess the significance of each step. **Results:**

The addition of American Thyroid Association risk stratification and Bethesda classification to preceding models were statistically significant ($P = .001$). The addition of molecular profiling (as a strategy independent of a particular test) was not significant ($P = 0.812$). The areas under the curve of the baseline model and models sequentially including American Thyroid Association stratification, cytopathology, and molecular profiling were 0.76, 0.85, 0.91, and 0.91, respectively. **Conclusion:** Clinical factors, sonographic characteristics, and cytopathology are sufficiently accurate in predicting malignancy risk of most thyroid nodules. **Keywords:** Thyroid nodules, thyroid algorithm, Bethesda Classification, malignancy.

S15: Frequency of methicillin resistant staphylococcus aureus in diabetic foot infections.

Muhammad Bilawal Khan. Service Hospital Peshawar.

Objective: To determine the frequency of methicillin resistant staphylococcus aureus in diabetic foot infections. **Study Design:** Descriptive Case Series. **Materials and Methods:** This study was carried out over 150 patients. After consent, Swab of pus from the diabetic foot were taken from all the patients and sent to laboratory for culture. Staphylococcus aureus (MRSA) were labeled as Staphylococcus aureus bacteria showing distinct growth of typical colonies after incubation for 24 hours at 37°C on cefoxitin mannitol salt agar. **Results:** In this study, 150 patients were observed. Average age was 46.7 years ± 9SD. Male to female ratio was 1.33:1. There were 67 (44.67%) patients shows Methicillin Resistant Staphylococcus aureus (MRSA) in diabetic foot infection. **Conclusion:** In our population the frequency of staphylococcus aureus bacteria in diabetic foot ulcer is high so it will be considered while treating such patients. **Keywords:**

frequency, Staphylococcus aureus, Diabetic Foot Ulcer, Diabetic.

S18: Outcome of one stage operative treatment for neglected developmental dysplasia of hip presenting late.

Wasim Khan. Northwest General Hospital and Research Center Peshawar.

Objective: Surgical treatment for treatment of developmental dysplasia of the hip (DDH) presenting after the age of one year is practiced widely. The aims of our study were to evaluate outcomes of one-stage surgical treatment of patients with DDH. **Study Design:** Retrospective study. **Materials and Methods:** We retrospectively reviewed 102 patients with DDH, all aged >18 months in Northwest General Hospital and Research Center Peshawar Pakistan. All the hip joints were treated with one-stage procedures including open reduction, capsulorrhaphy, pelvic osteotomy, femoral de-rotation osteotomy and shortening. The latest clinical and radiographic outcomes and complications were evaluated. **Results:** The mean age at surgery was 2.5 years. The average time of follow-up was 3.8 years (range: 1.3–6.4 years). McKay Functional scoring system was used to ascertain the clinical outcome of these patients and most of the patients scored good or excellent at the last follow up. Radiographic outcome of these patients was evaluated using Severin classification and the majority of our patients were classified as good or excellent. Few cases had a poor outcome according to the Kalamchi and MacEwen classification for AVN. We noted lower incidence of redislocation and residual acetabular dysplasia. **Conclusion:** One-stage operative treatment for DDH had a good outcome in our patients. Younger patients achieved better results than older patients. Tonnis grade II and III DDH is a risk factor for redislocation and residual acetabular dysplasia after the one-stage operation.

Keywords: Developmental dislocation of the hip, One-stage operation, Age, Osteonecrosis.

S22 : Frequency of hyperbilirubinemia in patients presenting with acute appendicitis at tertiary care hospital.

Qavi ullah mian. Khyber teaching hospital Peshawar.

Objective: To determine the frequency of hyperbilirubinemia in patients presenting with acute appendicitis. **Study Design:** To determine the frequency of hyperbilirubinemia in patients presenting with acute appendicitis. **Materials and Methods:** This descriptive study was performed at The Department of General Surgery, Khyber Teaching Hospital Peshawar. A total of 266 patients who met the inclusion criteria were included in the study. Trained surgeons with the at least five years of post-fellowship experience performed the surgeries. All the risk factors were made measurable on the bases of history, examination, and laboratory investigation. Patients were closely observed postoperatively. Special attention was paid to the development of wound infection or wound dehiscence. Hyperbilirubinemia was considered positive if the total serum bilirubin level was greater than 1mg/dl measured in the hospital laboratory. All the laboratory investigations were done by an expert pathologist having at least five years of experience. All the data were analyzed in SPSS Ver. 22. Numerical variables like age, duration of disease, and total bilirubin were presented as mean \pm standard deviation. Hyperbilirubinemia was stratified with age, gender, and duration of disease, obesity, diabetes, and hypertension to see the effect modifiers. Post-stratification chi-square test was applied in which a P value ≤ 0.05 was considered a significant value. Data were presented as tables and graphs where

appropriate. **Results:** The mean and SDs for age were 52 \pm 7.54. The mean and SDs for the duration of the disease were 27 \pm 7.76. 100 (37.59%) patients were recorded in the 18-45 years age group and 166 (62.40%) patients were in the 46-60 years age group. 144 (54.13%) patients were male and 122 (45.86%) patients were female. 77 (28.94%) patients were obese while 189 (71.05%) patients were non-obese. 77 (28.94%) patients were hypertensive while 189 (71.05%) patients were normotensive. 92 (34.58%) patients were having diabetes while 174 (65.41%) were found non-diabetic. 188 (70.67%) patients were recorded with hyperbilirubinemia. 45% of them belonged to the age group 46-60 years, whereas 49.62% of them had the duration of disease more than 24 hours. **Conclusion:** In this study, it has been concluded that serum bilirubin can help in diagnosing gangrenous/perforated acute appendicitis. **Keywords:** Acute Suppurative Appendicitis, Gangrenous/Perforated Appendicitis, Hyperbilirubinemia.

S29: Endoscopic Management of CSF Rhinorrhea: Our experience at Northwest General Hospital.

Imran Mohib Khan. Northwest General Hospital.

Objective: To evaluate our results for endoscopic CSF (Cerebrospinal Fluid) leak repair. **Study Design:** Retrospective study. Place and duration of study: Northwest general hospital & research center. Duration: 01st Mar 2020 - 23rd Nov 2021. **Materials and Methods:** Out of 97 Endoscopic Sinus surgeries which were performed a total of 5 patients were reviewed who underwent endoscopic CSF leak repair. Among them 3 were males and 2 were female patients. The age ranged from 6 -61 years. Out of these 2 patients had leak from the sphenoid sinus, 2 from cribriform plate and one from ethmoids. Endoscopic clinical examination along with radiological diagnosis with CT and MRI was essential in diagnosis and

confirming a defect for the CSF leak. Different techniques were employed based on the etiology and site of leak. These included cartilage perichondrium grafts and mucosal flaps including free grafts and vascularized flaps (Hadam flap). **Results:** Apart from one patient who required revision surgery, all the leaks including the revision resulted in successful closure at 3 month follow up. **Conclusion:** Our experience with endoscopic management of CSF leaks with relatively limited resources a er confirming the site of leak has been found to be effective. **Keywords:** Endoscopy, CSF, Rhinorrhea.

S30: Impact of COVID on Mucor mycosis management outcomes.
Imran Mohib Khan, Shehzad Saeed ullah.
Northwest General Hospital & Research Center.

Objective: To review the outcomes of patients with COVID associated Mucor mycosis in our setup. **Study Design:** Retrospective study Place and duration of study: Northwest General Hospital & Research Center. Duration: January 2021 to February 2022. **Materials and Methods:** 9 cases of COVID associated Mucor mycosis were identified. Of our patients, 7 were male and 2 were female, and the mean age was 52.7 years. All these patients were diabetic (either chronically or newly diagnosed) and were COVID positive at the time of surgery. The pre-op CT and MRI scans were reviewed for spread of disease. All the patients had active disease in their sinuses. 2 had spread to the orbits, 1 case had intracranial spread and 2 patients had spread both intracranially and to the orbits. All patients underwent FESS and aggressive debridement (7 requiring partial medial maxillectomies and 1 requiring revision surgery). Of the 4 patients with orbital disease, 2 underwent orbital exenteration, while 2 did not consent to the

procedure. Post operatively, all patients were put on IV Amphotericin, followed by oral Posaconazole, and strict glycemic control. The patients stayed in our COVID HDU. **Results:** 3 of 9 cases resulted in mortality while the remaining recovered (66.7% recovery rate). Of the mortalities, 1 patient had both intracranial and orbital involvement, 1 had only orbital involvement, and 1 had intracranial involvement only. All 4 patients with no local extension of disease recovered. The 2 cases that did not undergo orbital exenteration did not survive. **Conclusion:** Management of COVID associated Mucor mycosis remains to be a challenge. Orbital involvement and intracranial spread are poor prognostic indicators. Both our patients that underwent orbital exenteration survived, hinting that adopting a lower threshold for orbital exenteration may o er better chances of survival. Local removal of infected tissue, strict glycemic control, and antifungal treatment remain to be cornerstones of management. **Keywords:** Mucor mycosis, COVID.

S14: Late Presenting Partially Displaced Atrial Septal Closure Device: Surgical Vs Percutaneous Correction? A Case Report.
Mian Mustafa Kamal. Aga Khan University Hospital Karachi.

Objective: A Novel Surgical Technique. **Study Design:** Case Report. **Materials and Methods:** Introduction Atrial Septal Defect (ASD) is one of the most common congenital cardiac defects. Even though surgical repair of ASD is the current method of choice but percutaneous device closure is rapidly gaining popularity as it is less invasive. Dislodgment and embolization of the device may occur requiring urgent surgical retrieval. **Results:** Case Presentation We report a case of 54-years-old female patient with a history of ASD device closure 4 years ago, presenting with progressive shortness of breath for past 2 months. She had a partial dehiscence of an

ASD device causing a residual ASD of 17 mm. She underwent urgent surgical repair of an ASD with a bovine pericardial patch without ASD device being explanted. **Conclusion:** Clinical Discussion Management of a dislodged ASD device may be percutaneous or surgical. Dislodged ASD devices that present months after deployment may become fibro-adhered to the site of embolization. Hence its retrieval can be challenging even via open surgical method. Our case describes a novel method to repair a residual ASD and prevent complications associated with dislodgement of device without completely explanting the device. **Keywords:** Key Words: Case Report; Atrial Septal Defect (ASD); ASD closure device; Partially displaced ASD device; Late presentation; Bovine patch repair.

S24 : Incidence of hypocalcemia in immediate post operative period after total thyroidectomy.

Imran Mohib Khan, Muhammad Adil. Northwest General Hospital.

Objective: To find out the incidence of hypocalcaemia in patients undergoing total thyroidectomy in immediate post operative period after close extracapsular dissection. **Study Design:** retrospective study Place and duration of study: Northwest general hospital & research center. From Jan2018 to Dec 2019. **Materials and Methods:** There were 50 patients out of who 3 male and 47 female with mean age 51.2±5.5 underwent total thyroidectomy for the duration of 11 months. Before surgery TFTs of all patients were advised, out of which 46 patients were in Euthyroid status and 4 underwent surgery in Hypothyroid status. Out of the total, 39 cases were diagnosed as MNG or Benign and 11 cases were diagnosed with suspicion of malignancy on the basis of Radiology, FNAC and physical examination before the surgery. Careful close extracapsular dissection was

performed in all cases to preserve parathyroid glands and for its blood supply the vessels were tied/cauterized close to the capsule. **Results:** After surgery each patient stayed in ward with us for 2 days. during which patients were observed for hypocalcemia. serum calcium and PTH were performed each day. 32 patients developed (transient) hypocalcemia (out of which only 6 had low PTH levels), for which they were only given oral calcium and vit.d supplements with successful results. 18 patients were normocalcemic, so no intervention done. **Conclusion:** Incidence of hypocalcemia after total thyroidectomy with close extra capsular dissection was mostly transient due to manipulation of parathyroid gland blood supply which was successfully treated with oral calcium supplements. **Keywords:** Hypocalcemia, Thyroidectomy.

S19: Baseline characteristics and treatment in patients with developmental dysplasia of hip: A single centered experience. Fahad Jamil. Khyber Teaching Hospital Peshawar.

Objective: To determine the common age of presentation, side of presentation and gender wise distribution, common procedures performed for the correction of developmental dysplasia of hip in our population. **Study Design:** Cross Sectional Study. **Materials and Methods:** This cross-sectional study was conducted at department of Orthopedics, Khyber Teaching Hospital, Peshawar in four years. It included 237 (318 hips) patients by convenient sampling technique. Data analysis was performed using SPSS version 20. **Results:** Out of 237 patients, 84 (35.4%) had right hip affected. Mean age at presentation was 38.6 ± 28.9 months. Most patients (n = 76, 32.1%) presented in second year of their life. Females (n = 176, 74.3%) were affected more than males (n = 61, 25.7%). Out of total, 315 hips were managed surgically while three were treated without surgery. Average

hospital stay was 2.7 ± 1 days. Reasons of late presentation were absence of screening at time of birth in 229 (95.6%) abnormal gaits noted at time a child started walking in 213 (90%), no parents education regarding developmental dysplasia in 233 (98.5%) and unavailability of expert pediatric orthopedic surgeon at their locality in 24(10%).

Conclusion: We noted late presentation of the patients, and reasons were absence of screening, no symptoms before child start walking, no education of parents and unavailability of expertise in peripheries, which usually affect the outcomes of the treatment. Demographics showed that female gender and right hip were more affected than male gender and left hip. **Keywords:** Developmental Dysplasia of Hip, Hip Dislocation, Congenital, Open Reduction, Close Reduction.

S25: Effect of Helmet use on Outcome of Traumatic Brain Injury from Road Traffic Accidents.

Mustafa Qazi, Sohail Daud Khan. NWGH and RC.

Objective: Traumatic brain injury (TBI) is the leading cause of death and disability worldwide. A large proportion of people with TBI are young males from road traffic accidents (RTAs). Estimation of the healthcare costs are important for driving decisions regarding policy implementation and improvement in healthcare coverage. The objective was to comparatively study head injured motorcyclists with and without helmet use in terms of treatment cost. **Study Design:** Cohort study. **Materials and Methods:** A cohort study was conducted at the Department of Neurosurgery, NWGH & RC Peshawar from 9 October 2020 to 9 April 2021. Data of all patients presenting to the Emergency Department, getting admitted and following the whole treatment was collected. Data about age, gender, date of admission, date of discharge, mechanism of injury, GCS on arrival, helmet use, CT-Scan diagnosis, length of stay, outcome (GOS at

the time of discharge) and total treatment cost in PKR at the time of discharge was collected. Detailed clinical exam / investigational studies were performed. A GOS of 4 and 5 at the time of discharge was considered as a favorable result while a GOS of 3 or less was considered unfavorable. All TBI patients were managed according to ATLS protocol and after stabilization the definitive treatment was provided according to final diagnosis. **Results:** In the current study a total of 60 patients of motorcycle RTAs were observed. The helmeted patients were designated as Group A and those non-helmeted were termed Group B. Our study shows that in Group A (helmeted) mean age was 33 years with $SD \pm 9.51$ while in Group B mean age was 31 years with $SD \pm 10.49$. All the patients in both groups were male. In Group A, 28 (93%) patients and in Group B, 22 (72%) patients had a favorable outcome whereas 2 (7%) patients in Group A and 8 (28%) patients in Group B had an unfavorable outcome. The mean cost for Group A patients was 2.18 ± 1.09 and for Group B was 4.89 ± 1.35 . **Conclusion:** Our study concludes that helmet use has a more favorable outcome and low treatment cost as compared to non-helmeted motorcyclists having traumatic head injury. **Keywords:** road traffic accident, motorcyclists, helmet use, treatment cost, traumatic brain injury.

S27: Efficacy of Epidural Methylprednisolone in Patients with Herniated Lumbar Disc.

Mr Mustafa Qazi, Irfan Jan. NWGH and RC.

Objective: To determine the outcome of topical epidural methylprednisolone versus control in lumbar disc surgery patients. **Study Design:** Randomized control trial. **Materials and Methods:** A randomized control trial was conducted at the Department of Neurosurgery, NWGH & RC Peshawar over a period of 6 months from 11 March 2021 to 11 September 2021. A total of 60 patients aged 18 to 65 years and diagnosed as cases of herniated lumbar discs with ASA Grade 2

or below were included in the study. The patients were divided into 2 study groups i.e Group A and Group B where the former group received topical methylprednisolone and the latter was control group and no topical methylprednisolone had been used. Study group assignment was done using the lottery method. **Results:** The mean age was 42 years (SD \pm 10.73) in Group A and 43 years (SD \pm 9.84) in Group B. In Group A, 18 (60%) patients were male and 12 (40%) were female whereas in Group B, 19 (62%) patients were male and 11 (38%) were female. For Group A patients, the mean hospital stay was 2 days \pm 1.27, mean OLOBII score was 35% \pm 7.01, mean Visual Analogue Scale (VAS) score was 3 \pm 2.09, mean time to resumption of Activities of Daily Living (ADL) was 7 days \pm 1.27, mean dose of paracetamol (per day) was 3 mg \pm 0.59, mean dose of Ketorolac (per day) was 90 mg \pm 7.13. For Group B, the mean hospital stay was 3 days \pm 2.67, mean OLOBII score was 45% \pm 5.09%, mean VAS score was 5 \pm 2.34, mean time to resumption of ADL was 10 days \pm 2.67, mean dose of paracetamol (per day) was 4 mg \pm 1.27, mean dose of dose of Ketorolac (per day) was 100 mg \pm 9.13. A favorable outcome was observed in 27 (91%) patients of Group A and 25 (83%) patients of Group B. **Conclusion:** Our study concludes that the use of topical intra-operative methylprednisolone in lumbar disc surgery leads to prominent improvement in pain relief and early resumption of daily life activities as compared to without the use of topical methylprednisolone. **Keywords:** epidural methylprednisolone, lumbar disc surgery, herniated disk.

S4: Comparison of Alvarado score, Appendicitis Inflammatory Response Score and RIPASA score in Predicting Acute Appendicitis.

Muhammad Zeb. HMC Peshawar.

Objective: The purpose of this study is to compare the efficacy of Alvarado, AIR and

RIPASA score in the diagnosis of acute appendicitis. **Study Design:** Prospective Cohort Study. **Materials and Methods:** Alvarado, AIR and RIPASA score were prospectively applied to 132 patients admitted with acute appendicitis in General Surgery unit of Hayatabad Medical Complex, Peshawar, Pakistan from 1/01/2022 to 31/07/2022. Diagnosis was confirmed by histopathology report. Cut o value of score >7 , >5 and >9 was set for Alvarado, AIR and RIPASA score, respectively. Statistical Analysis was done by SPSS version 23. **Results:** Total of 132 sample size were included in this study in which there were 79(59.8%) male and 53(40.2%) female. Mean age was 24 years (SD of 11.6) with youngest patient of 9 years and oldest one was 70 years old. Negative Appendectomy rate was 8.3 %(n=11). RIPASA score was superior to AIR and Alvarado score in Sensitivity, Accuracy and AUC. AIR score performed better in specificity, NPV, LR+, NR+ compared to RIPASA and Alvarado score. **Conclusion:** RIPASA score is overall better scoring system is diagnosing acute appendicitis in our population compared to Alvarado and AIR score. **Keywords:** Acute Appendicitis, Alvarado Score, AIR, RIPASA.

S5: Recurrent Renal Tumor after radical nephrectomy: Rare Case Report & Predictive values of over expression of Ki 67 as Prognostic Indicators in recurrence of renal tumor after radical Nephrectomy. Naveed Ahmad Khan. Institute of Kidney Diseases Peshawar.

Objective: To Appraise the rare presentation of recurrent rare tumors (C5) & devise the management Plan for difficult case (C6). Also, to study the predictive value of over expression of Ki 67 in recurrence, tumor free survival and 5-year survival rate in renal tumor. **Study Design:** It is a descriptive study that was conducted in Team C Urology at Institute of Kidney Diseases HMC Peshawar from 2017- 2022. Total numbers of 12 cases

with recurrence of growth were recorded by non-probability consecutive sampling. Resection of the recurrence of tumor bed was performed in all cases. The preoperative, intraoperative and postoperative details were recorded on structured proforma and were analyzed on SPSS. **Materials and Methods:** It is a descriptive study that was conducted in Team C Urology at Institute of Kidney Diseases HMC Peshawar from 2017-2022. Total numbers of 12 cases with recurrence of growth were recorded by non-probability consecutive sampling. Resection of the recurrence of tumor bed was performed in all cases. The preoperative, intraoperative and postoperative details were recorded on structured proforma and were analyzed on SPSS. **Results:** We have performed 430 radical nephrectomies from 2017 till Sept. 2022. We recorded 12 cases of recurrence of growth in renal bed accounting 1.8 % of total. The mean time to recurrence was 18 ± 3 months (Average 3 months till 4 years). The recurrence was picked during follow up ultrasounds with mean size of recurrence was 8.5 ± 4 cm. It was confirmed by CT scan. In toto excision was successful in 11 cases while 1 patient required Hartsman procedure as tumor had eroded the colon. Out of 12, Chromophobe carcinoma was found in 3 while 6 had clear cell carcinoma, 2 had papillary carcinoma & One is Translocation RCC. Ki67 was positive in all cases of chromophobe cell carcinoma and 2 cases of clear cell carcinoma. We recorded mortality in 3 patients of chromophobe cell carcinoma and 1 patient of clear cell carcinoma with median follow up of 30 months. **Conclusion:** TEF Translocation RCC is very rare variant of RCC Recurrence of renal tumor is although rare entity yet challenging for urologists Tumor stage, Grade and Ki 67 overexpression is poor prognostic indicator for recurrence. **Keywords:** 1992.

S6: The Efficacy and Safety of Percutaneous cystolithotripsy for vesical calculus in

pediatric population, A single center experience.

Gohar Alam. Qazi Hussain Ahmed medical complex Nowshera.

Objective: To assess the outcome and safety of PCCL in developing country where endourological facilities are scarce. **Study Design:** descriptive study. **Materials and Methods:** This is a descriptive study and was conducted at Institute of Kidney and Disease (IKD) Hayatabad, Peshawar from January 2020 to August 2021. A total of 30 pediatric patients underwent percutaneous cystolithotripsy (PCCL) during this time period. A complete and pertinent History and relevant examination and appropriate investigations were carried out in all patients. The diagnosis was based on ultrasonography and plain X-rays Urine was tested for culture and sensitivity. The figure 1 shows the x-ray KUB of the patient with bladder stone. The procedure was performed under general anesthesia. All patients received single therapeutic dose of cephalexin (15 mg/kg). It was initiated with Urethro cystoscopy to exclude any sub vesical obstruction (urethral valve, urethral stricture) or rather to push the urethral stone back into the bladder (one patient in current series). Bladder was distended with saline and suprapubic puncture was made. Floppy tip straight guide wire was inserted and approximately 1 cm incision made over puncture site. Fascial dilators up to 12Fr was used and placing guide rod one step dilatation was done with Amplatz dilator of 26 Fr. The procedure was performed under direct vision by telescope. Nephroscope was introduced and a er full inspection, stone was taken either intact or a er fragmentation depending on the size. A er the procedure per urethral catheter was passed and removed a er 48 hours post procedure. The patients were followed typically for 3-4 weeks postoperatively with x-ray KUB /ultrasonography to document clearing of all the fragments. Outcome and safety have been assessed in the form of symptomatic

improvement as well as hematuria, infection/sepsis, mucosal injury and retreatment. The data was collected in structured proforma and analyzed on SPSS 2018 version using convenience sampling technique. Inclusion criteria: All those patients were included with confirmed radiologic diagnosis of bladder stone. Exclusion criteria: Those patients were excluded having sub vesical obstruction such as posterior urethral valve (PUV) urethral stricture, concurrent genitourinary abnormalities. Statistical analysis: The data was collected with the aid of structured proforma and was entered and analyzed on SPSS 2018 version. The results were presented and displayed in the form of tables. Mean and standard deviation obtained for continuous variables. Similarly, frequency and percentages were determined for categorical data. Continuous data were analyzed using T test and categorical data with chi-square test. Significance value was set at a p value of <0.05. Operative procedure: All procedures were performed in the main operating theatre. The procedures were performed under general anesthesia. Cystourethroscopy was performed in lithotomy or frog leg position in all patients for confirmation of principal diagnosis and exclusion of associated pathologies as shown in figure 2. The urethral stone was also pushed in the urinary bladder during cystourethroscopy. Bladder was distended with saline and suprapubic puncture was made. Floppy tip straight guide wire was inserted and approximately 1 cm incision made over puncture site. Fascial dilators up to 12Fr was used and placing guide rod one step dilatation was done with Amplatz dilator of 26 Fr. The procedure was performed under direct vision by telescope. Nephroscope was introduced and a full inspection, stone was taken either intact or a fragment depending on the size. Afterwards, per urethral catheter was left in situ for 48 hours. The video showed the operative procedure practiced in our institution could be made available on

demand. **Results:** A total of 30 patients presented to us during nineteen months of study period. None of the patients had previous history of vesical calculus. Median age of the patients was 4.1 years. The patient's demographic variables are shown in Table 1. Male outnumbered the procedure with ratio of 28:2. With median symptoms duration of 3.1 days, majority presented with dysuria and increase urinary frequency. The other mode of presentations was acute urinary retention and decrease urinary stream (Table 2). Median size of the stone was 10.1 mm. All patients were rendered stone free in single session (Table 3). All patients were voiding spontaneously at the time of discharge. There were minor postoperative complications (hematuria, infection/sepsis and minor mucosal injury) noted in short term follow up as displayed in table 3. The highest of the stone composition were uric acid stones (86.70%) followed by calcium (10.0%) and mixed stones (3.30%) as shown in Figure 3. **Conclusion:** Despite the scarcity of endourological care in developing countries like Pakistan our results of PCCL for vesical stones in children are comparable to the results of developed countries in terms of effectiveness and safety. Percutaneous suprapubic lithotripsy is a safe and effective method for the treatment of bladder stones in children. It is fast and associated with minimum complications. **Keywords:** Bladder calculi, children, percutaneous cystolithotripsy.

S7: Management of Retained Bomb blast Pallets in Urological Practice: Case Series. Asiya Hassan. Institute of Kidney and Disease.

Objective: To present the largest of case series of management of retained bomb blast pallets from genitourinary organs. **Study Design:** Case Series. **Materials and Methods:** Materials and methods: Study design Descriptive Study Setting Institute of Kidney and Diseases, Peshawar Duration June 2015 till March 2021 Sample size 11

patients Technique Non probability conventional sampling Inclusion criteria: All patients with high index of suspicion of foreign body with any presentation, having bomb blast injuries in the past. Exclusion criteria: All those patients were excluded from the study with retained foreign bodies other than bomb blast pellets and diseases like renal stones. Ethical consideration: The study was authorized and endorsed by Institutional Research and Ethical board (IREB) of Institute of Kidney and Diseases. All participant's attendants delivered informed consent in accordance with Helsinki declaration Data analysis: Between June 2015 and March 2021, 11 patients were treated for foreign bodies at Institute of kidney and Diseases, Peshawar. All records of these patients were retrospectively analyzed to characterize the patient's demographics, clinical presentation, location and how the case was managed. The results were presented and displayed in the form of tables. Mean and standard deviation obtained for continuous variables. Similarly, frequency and percentages were determined for categorical data. Continuous data were analyzed using Z test and categorical data with chi-square test. Significance value was set at a p value of <0.05 Total of 11 patients (all men, mean age 29.2 ± 3.6 years) with a diagnosis of FB in the form of bomb blast pellets in the urinary system were treated between June 2015 till March 2021 at our institute. In all cases, laboratory evaluation including kidney function tests and urinary analysis were done a er detailed history was recorded, and urinary ultrasonography and/or computed tomography (CT) were performed for radiologic diagnosis. Migrated ureteral stents and other FBs were excluded from the presented study. Radiological evaluation was done to confirm the stone and FB-free status if a previous surgery of endoscopic stone treatment was present. Treatment decision was made according to clinical and radiographic findings. The radiographs and images of bomb blast pellets retrieved from genitourinary tract are shown

in figure 1-7 Preoperative antibiotic prophylaxis (first-generation cephalosporin) was given in all cases. Patients with bladder FBs underwent cystourethroscopy and cystoscopy removal of the FBs under general anesthesia. For patients with upper urinary tract FBs, percutaneous nephrolithotripsy and open reconstructive procedures in the form of ureteric reimplantation and Boari flap were carried out under general anesthesia. Lastly, for patients with FBs in testes and penis open surgical removal was employed. Also, a er PCNL and ureteric reimplantation 6-F 26-cm JJ stent was placed at the end of the procedure for 1 month.

Results: Patient demographics, location of FBs, clinical presentation, indwelling time, and types of treatment are shown in Tables 1 ,2 and 3. Table 4 shows the most common procedure used to remove bomb blast pellet from upper and lower urinary tract. A total of 11 patients were enrolled in our study. Their mean age was 29.2 ± 3.6 years. All of patients were males as shown in table 1. The majority of the patients were young adults of 25 to 45 years of age (n=36%) followed by patients of age group of 19-25 and >44 with a percentage of 27% and 18% respectively. However, the patients between 13-18 and under 12 years displayed the similar trends having a percentage of 9 for each group respectively. All patients but 1 were symptomatic at presentation and reported various urinary symptoms. Hematuria and flank pain were the most common symptoms especially for upper urinary tract FBs. However, lower urinary tract symptoms and difficult urination were reported in cases having bladder and penile FB. However, perineal pain was the chief complain of FB in the testes. The clinical presentation and indwelling time is shown in table 3. Patients (P2, P5, and P10 in Table 3) had undergone percutaneous Nephrolithotomy at our hospital for the removal of FB from kidneys. Two patients were admitted to the hospital with flank pain and hematuria 1 and 2.5 years a er the bomb blast, whereas the remaining one was asymptomatic and picked

accidentally on routine medical checkup for another illness a er 2.5 years of the incident. On radiologic evaluation, stone formation was observed around the pellets. The asymptomatic patient was diagnosed with FB in the urinary system during his routine control follow-up 2.5 years later. Three other patients (P3, P8 and P11 in Table 3) were shown to have bomb blast pellets in urinary bladder and two of them presented with LUTS 2 years a er the bomb blast while 1 patient presented with AUR 9 months later. All of them were successfully treated with cystoscopic removal of FB. Cystoscopy showed encrusted FB in bladder (figure 5). Moreover, patients (P1 and P7 in Table 3) presented with flank pain, hematuria and systemic symptoms like fever and vomiting had shown to have ureteric injury and presented at 15 days and 2 months a er the bomb blast. They had undergone ureteric reimplantation with Boari flap for the management of their injuries. The next patient (P4 and P9 in Table 3) was admitted to the hospital for open surgical removal of FB from their testes. They initially presented with perineal pain 5 and 8 months a er the incident. Lastly, (P6 in Table 3), the FB, was recovered from the penis 1 month a er the bomb blast. The patient presented with perineal pain and difficulty in voiding. The FBs were successfully removed via open surgical approach. (Figure 7). The table 4 showed that the most frequently encountered places in upper urinary tract was kidney whereas in lower urinary tract, urinary bladder was the most common location. All patients were evaluated with radiologic investigations including CT and/or ultrasonography (Figure 1 and 4). Cystoscopy was performed on all patients for both diagnostic and therapeutic means for bladder FBs (Figure 5). Endoscopic surgery was performed without any complications under general anesthesia. Lower urinary tract FBs were removed through the cystoscope with the use of grasping forceps. Percutaneous Nephrolithotomy with Intracorporeal lithotripsy were performed for

FBs in the kidney covered with calcifications, which were broken into small pieces and the FBs were removed by grasping forceps in all cases (Figure 2 and 3). At the end of these procedures, JJ stents were placed in the patients with upper tract FBs. Patients were discharged from the hospital without any complications. **Conclusion:** Bomb blast injuries are frequent in Pakistan and affect the civilian population. Young males are generally affected more. The bomb blast pellets retrieved from genitourinary tract are quite uncommon as most of the FBs results from iatrogenic, traumatic and psychiatric issues. The lower urinary tract FBs can be successfully retrieved with endoscopic and minimally invasive techniques. However, under some circumstances open surgical removal is the safest and only option available. In the upper tract FBs, the diagnosis can be perplexing and direct visualization may be obligatory. So, removal of FBs may necessitate percutaneous or open surgical techniques. **Keywords:** bomb blast pellets warfare injuries endoscopic retrieval.

S9: Comparative Study Between Snodgrass (tabularized incised plate Urethroplasty) and Snodgraft surgical repair of hypospadias in children.
Muhammad Mudassir Mahboob. Northwest School of medicine.

Objective: To compare the fistula rate of tabularized incised plate urethroplasty & spongioplasty and same with dorsal inlay graft in selected patients undergoing hypospadias repair. **Study Design:** Randomized Control Trial. **Materials and Methods:** Setting: Plastic surgery Unit, Northwest General Hospital and Research Centre, Peshawar. Duration: From 25 February 2021 to 26 August 2021. Sampling technique: Nonprobability (Consecutive sampling). **Results:** In Snodgrass (Control group), the post-operative fistula formation was seen in 20 (17.40%) patients. Similarly, in Snodgraft (Interventional group), 06

(5.021%) patients had presence of fistula. As per safety was concerned, in Snodgrass, the safety of the procedure was recorded in 95 (82.60%) patients whereas in Snodgraft, the safety of the procedure was recorded in 109 (94.79%) patients. **Conclusion:** Our study concluded significantly improved success rate in the Snodgrass repair as compared to Snodgrass repair. **Keywords:** Hypospadias, Urethrocuteaneous Fistula, Snodgrass repair, Tabularized incised plate urethroplasty i.e. TIPS with dorsal inlay graft.

Basic Sciences

B2 Title: Job Satisfaction And Associated Factors Affecting Level Of Job Satisfaction Among Kp Anesthetists, Pakistan.

Omama Shahid. Bacha Khan Medical College Mardan.

Objective: The aim of this was to determine the level of job satisfaction and associated factors among anesthetists working in government and private hospitals of Khyber Pakhtunkhwa (KP). **Study Design:** Cross sectional study. **Materials and Methods:** A cross-sectional study was conducted to determine the level and factors acting level of JS of KP anesthetists from February to August 2021. Data were analyzed using SPSS version 26. Model fitness was checked using a Hosmer–Lemes how goodness-of-fitness test. To compare gender and hospital type with JS, the chi square test was used. P-value of <0.05 was used to determine statistical significance. Binary logistic regression was used to measure statistical significance between dependent and each independent variable. **Results:** The mean age recorded in the data was 35.5 ± 7.20 . In total $n=112$, about 88.4% of anesthetist were satisfied and 11.6% were unsatisfied. There was no significant association between anesthetist gender and JS. The p value 0.473 indicates no significance between JS and hospital sector. Further analysis using binary logistic indicates that lack of recognition,

management, health-care system, and interaction with surgeon was the significant factors influencing satisfaction among anesthetist (Wald score: 5.737, p value: 0.17, OR: 0.399, CI 0.188-0.846). **Conclusion:** Job satisfaction among KP anesthetists is high. Job satisfaction JS is strongly linked to recognition, management, health-care system, and interaction with surgeon. **Keywords:** Anesthetists, Factors, Satisfaction, Dissatisfaction.

B16: Effects of social media on the Academic Performance of Undergraduate Medical Students of Peshawar
Mr Abid Hussain Pak International Medical College Peshawar.

Objective: To assess social media effect on academic performance of medical students.

Study Design: A Descriptive Cross-sectional study was carried out from April to June 2022. Total of 400 undergraduate medical students both male and female from district Peshawar were selected. A validated questionnaire based on demography, social media addiction and students' academic performance. Data collected was analyzed using Microsoft excel and SPSS v.25. **Materials and Methods:** Descriptive cross-sectional study. **Results:** A total of 400, male 220(55%) female 180(45%). Those students who are addicted by social media and leads towards poorer academic performance male $N=155(70\%)$, female $N=117(65\%)$. Out of 400 who used websites like Wikipedia or social media platform had a positive impact strongly agree $N=174(43.5\%)$, Agree $N=149(37.3\%)$, Disagree $N=56(14\%)$ and strongly disagree $N=21(5.3\%)$.

CONCLUSION: The result from the findings of this study showed that, though social media have negative effects on teenagers such as lack of privacy, distracting students from their academic work, taking most of their productive time, and such like, they also have benefits and can be used appropriately. For instance, students can form online communities in order to plan for a project,

have group discussions about class material, or use the social networking sites (SNS) as a way to keep in contact when a student who has been absent needs to be updated on current academic information. The findings of this study and earlier ones showed some noteworthy results. The first independent variable influencing the academic performance of students, that is, social media participation was negatively related with students' outcome, while the other independent variables were positively related with students' outcome. The results of this study suggest that lecturers should come up with a template on how their students can maximize the benefits of Social media, that school management should incorporate rules and regulations on the use of the social media in the school and, that the government should put in place adequate control measures to regulate their use among students and lecturers.
Keywords: social media, Academic performance, cross sectional, district Peshawar, medical students

B17 : Telemedicine as an essential part of healthcare system; Perspective of Healthcare providers.

Beenish Faraz, Ibad Ur Rahman Pak International Medical College.

Objective: To explore the perspective of health care providers in KP towards telemedicine. **Study Design:** Descriptive Cross-Sectional Study. **Materials and Methods:** A descriptive cross-sectional study was conducted between March-August 2022 in Peshawar, KP. The study included healthcare providers working in different public and private hospitals in Peshawar. Non probability convince sampling was used. Total sample size was 384. Data was collected through a structured questionnaire and was analyzed using SPSS version 25. **Results:** The results showed that 83.1% of participants were familiar with the term telemedicine. 61.7% were of the opinion that telemedicine services are reliable and 64.3%

thought that it provides location independent access to healthcare. 56.3% of participants thought that telemedicine has more benefits than disadvantages; 70.6% were of the opinion that it reduces patient's burden on hospitals; 71.1% recommended telemedicine to be the part of health system and 63% thought that telemedicine should be included in the curriculum of medical school. **Conclusion:** Findings from this study highlighted that majority of participants were of the view that telemedicine can effectively reduce patient burden on health system. Among other benefits, telemedicine improves follow-up care, ensures patient access to services and allows providers to treat patients at home and in remote areas.
Keywords: Telemedicine, healthcare provider, perspective, cross-sectional study.

B18 : Use of Nutritional Supplements Among Medical Students of Peshawar Khyber Pakhtunkhwa.

Mifzal Uddin Khattak, Habib Ullah Khan Pak International Medical College.

Objective: To investigate the prevalence of nutritional supplements among medical students of district Peshawar and to compare male and female usage of nutritional supplements of medical students in district Peshawar **Study Design:** Comparative Cross-Sectional study. **Materials and Methods:** This study was a comparative Cross-Sectional study conducted in Peshawar from May 2022 to June 2022. Cochran's formula was used to determine a sample size of 400 students A close ended Questionnaire was developed. Samples from PIMC, RMC, KMC, KGMC, PMC, NWSM were taken after getting ethical approval from Ethical Committee of the institution. Data was analyzed using the SPSS25. **Results:** Out of the total Males were 46.8% and females were 53.3%. Regarding age, 29.3% were in the age group of 18 to 20 years and 59.8% in the age group of 21 to 23 years and 11% in the age group of 24 to 26 years. 39.8% students were taking nutritional supplements and 60.3% were not taking any

supplements. **Conclusion:** Most of the students agreed that their health performance was good enough with the use of Nutritional Supplements. Female students are using nutritional supplements on regular basis. More awareness strategies should be adopted for better nutrition and life style of the students. **Keywords:** Nutritional Supplement, Cross sectional study, Medical.

B25: Prevalence of Anaemia and Associated Factors Among School Going Children Between Ages Of 5- 15 Years In District Peshawar, Pakistan. Kashif Ur Rehman Khalil, Mustafa, Rubeena Gul, Natasha Junaid, Roomana Ayub, Sadaf Bilal. Khyber Medical College Peshawar.

Objective: The aim of the study was to assess the prevalence of anaemia in school going children of district Peshawar, Pakistan. **Study Design:** Cross sectional study. **Materials and Methods:** Peshawar, Khyber Pakhtunkhwa, Pakistan with an objective to measure the prevalence of anaemia among school going children and their associated determinants. The period of study was from February 2019 to June 2021. Ethical approval was taken from institutional ethical committee. Consent was taken from parents/guardians of the children. Students and school staff were assured for the confidentiality of all information. Children of sex, studying from class 1 to class 10 between 5-15 years age and willing to participate were selected. Children with history of any systemic illness or with any known drug allergy were excluded from study. Net sample size for this study of 240 students was determined by using single population formula. Prevalence of anaemia from previous study (50%) was considered and margin of error was kept at 5% with 95% confidence interval. Sample size included a total of 30 students from each school and a total of eight schools were included. Data was collected by cluster random sampling method. Two towns were selected and then in each town two union

councils were selected. In each Union Council, a school was randomly selected and, in each school, every eight student was selected according to roll number. **Results:** Out of 240 school children participated in this study, 57.5% were males with mean age of 10.21 (S.D \pm 1.89) years while remaining 42.5% were female children with mean age of 11.01 (S.D \pm 2.56) years. Among 240 school going children, 93 (38.75%) were found anaemic and 147 (61.2%) were non-anaemic (see Figure 1). Among total 93 anaemic children mild anaemia was found to be present in 33 (13.7%) of children (Table 2) while moderate and severe anaemia was reported in 48 children (20%) and 12 (5%) children respectively. Moreover, on analysing degree of anaemia evaluation as per sex and age group distribution severe anaemia was present in 2.8% of the male's study population; while it was present in 15.8% of females of the study population. The lower age group children (5-11) have moderate anaemia while with increasing age of more than 14 years has mild anaemia (see Table 3). Anaemia was seen in 34.7% of males and 44.2% of females of study group. The prevalence of anaemia was more in girls than boys ($p = 0.171$) (Table 4) Concerning the location the rural areas children were more anaemic i.e. 45.8% compared to the urban parts comprising of 31.6% anaemic patients with P value significant ($P = 0.018$). Less proportion of anaemia was reported in the families having less than 5 members (36.1%) in comparison to having more than 5 members. About dietary habits (57.6%) vegetarian children were anaemic ($P = 0.021$). Haemoglobin level showed a rising trend with improved socio-economic. **Conclusion:** The present study thus brings out the fact that anaemia is a mild public health problem among school children population of district Peshawar. It is seen that anaemia was an indicator of poor nutrition and poor health, with major consequences on the human health and also on the social and economic development. From the above results, the authors concluded that anaemia was present

in higher proportion in female children. In this study, It was strongly associated with low socio-economic status, dietary habits, and worms infestation. Moreover, health education that enhances the knowledge of women about child feeding practices should be given regularly. **Keywords:** Anaemia, School going children, Pakistan.

B26: Concordance between Intraoperative Frozen section and Permanent section diagnosis in a single tertiary care hospital.

Masroor Hassan, Nuzhat S Khattak, Syed Hamidullah Shah, Syed Munawar Ali Shah, Saman Hussain, Naeem Khattak Northwest School of Medicine.

Objective: To study the concordance and deferral rates of intraoperative frozen section consultation. **Study Design:** Descriptive cross-sectional study. **Materials and Methods:** This descriptive cross-sectional study was carried out in the department of Histopathology, Northwest General Hospital and Research Center from June 2021 to July 2022. All the consecutive frozen section cases received from Neurosurgery, Hepatobiliary, ENT and Thoracic surgery were included in the study. Diagnoses of frozen sections were made by three pathologists. The concordance with permanent sections and deferral rates were calculated. **Results:** Of the 108 frozen sections received, 54 were from Neurosurgery, 43 from hepatobiliary surgery, 10 from ENT and 1 from Thoracic surgery. Age range was 5-82 years and 63 cases (58%) were from male patients. Discordance between Frozen section and permanent section diagnosis was seen in two neurosurgical cases (1.8%). One of them was central neurocytoma and other was Glioblastoma multiforme, which were misdiagnosed as high grade glioma and low grade glial neoplasm respectively due to sampling error. Four cases (3.7%) which were deferred to permanent sections include Di use large B-cell lymphoma, embryonal neoplasm, schwannoma and cavernous

angioma. Accuracy of margin status was 100%. **Conclusion:** The diagnostic errors and deferral rates were within the range of national and international statistics on frozen section. Adequate sampling both by surgeon and pathologist may further improve the diagnostic accuracy of frozen section. **Keywords:** Frozen section, Intraoperative consultation, Concordance,

B36: Stress Related Changes due to Valsalva maneuver in Healthy Young Individuals of Khyber Pakhtunkhwa

Umema Zafar, Summan Khan, Nimra Zafar, Sara Sajjad. Khyber Medical College.

Objective: To assess the changes induced by valsalva maneuver on the body depicted via an ECG. **Study Design:** cross sectional study. **Materials and Methods:** A total of 119 subjects were included in research, those with morbidities were excluded. The rest were made to perform the Valsalva maneuver for 15 seconds at maintaining pressure of 40 mmHg. The blood pressure, ECG and heart rate were measured during and a er the procedure. The data was then analyzed using SPSS version 26.0. **Results:** The significantly affected parameters by stress were blood pressure PR, RR, QT intervals and T wave. The changes in the parameters, at rest, were either insignificant or were differentially significant in both the genders. **Conclusion:** Valsalva maneuver has a direct effect on blood pressure and ECG and in turn on pumping of the heart. **Keywords:** ECG, stress, Valsalva maneuver, blood pressure.

B 38: Declining Empathy in Medical Students.

Authors: Dr Farooq Ahmad Khan, Dr Bilqis Hassan & Dr Almas Fasih Khattak.

Objectives: This study was designed to test the hypothesis that the medical students' empathic orientation has a fall as they progress through in medical school. This hypothesis was based on the idea that

without a deliberate educational program to maintain and nurture the empathetic traits of a student and their prolonged exposure to medical situations would decline the empathy in the them. **Materials and Methods:** The study participants were 85 medical students that have their clinical rotations from 3rd year till Final year, (24 3rd year, 36 4th year and 25 Final year). The questionnaire included 11-items answered on a 4-point Likert Scale with Strongly Agree being awarded 4 points as the highest and Strongly Disagree awarded 1 point as the lowest. The questionnaire was constructed based on the development of a conceptual framework for understanding empathy in patient care situations and defining the concept. This questionnaire was validated by a Psychiatrist and a Medical education specialist before being piloted. **Result:** The questionnaire was distributed to students from year 3rd, 4th and Final as these are the years that have active clinical rotations. Participation was voluntary, as the questionnaire was administered to 300 students of the different classes a total of 85 students responded. The total mean empathy score was 4.231. This change of scores was statistically not significant (P-value 0.202), showing that no significant decline was recorded amongst the students of the different years. **Conclusion:** Declining empathy was not clinically relevant for all findings that were statistically not significant, but the minuscule downhill inclination in the study suggests that empathy in medical school may change. Further extensive research should be carried to identify factors that contribute to changes in empathy. As the outcome of the turnout of students was very low and also many other factors and variables can be added to the study such as gender and age for a more accurate and extensive research. **Keywords:** Empathy. Medical Students. Clinical Rotations.