ORIGINAL ARTICLE

INTERNATIONAL JOURNAL *of* MEDICAL STUDENTS

The *International Journal of Medical Students* (IJMS) is an open-access, peer-reviewed scientific journal (ISSN 2076-6327) that publishes original research in all fields of medicine. The Journal was created in 2009 to share the scientific production and experiences of medical students (*i.e.*, MBBS students, MD students, DO students, MD/MSc students, MD/PhD students, etc.) and recently graduated physicians (<3 years into practice) from all over the world. Our objective is to be the primary diffusion platform for early-career scientists, using standards that follow the process of scientific publication.

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Abstracts of the 6th Edition International Medical Students' Congress of Bucharest (IMSCB)

Abstracts of the 6th Edition International Medical Students' Congress of Bucharest (IMSCB)

Introduction

The International Medical Students' Congress of Bucharest (IMSCB), is one of the greatest events to happen every year at the beginning of winter, within the walls of our university – Carol Davila University of Medicine and Pharmacy, Bucharest, Romania. Our Congress has its own unique history with its origins spanning back to the creation of our student society in 1875. After the second world war (when society activities were suspended), it was re-established in 1990, with our first ever congress taking place in May of 1998. Then in 2017 the decision was made to open up our congress to the rest of the world by founding the International Medical Students' Congress of Bucharest.

As medical students intrigued by the never-ending beauty of curiosity and innovation in healthcare, we have confronted ourselves with plenty of obstacles throughout our path in the scientific world. Ambition, and the conviction that we can be the change that the world needs have led us to pursue our dreams despite every closed door.

We believe that young talents and bright minds should be encouraged to showcase their take on various scientific topics and to explore their out of the ordinary ideas. So, last year, we provided an environment where research opportunities are more accessible and where activating in science can become a normality, not a particularity.

The following 34 abstracts demonstrate the hard work of students participating in the 6th edition of our congress (which took place at the end of 2022). As well as our profound gratitude towards the tireless efforts of the medical and scientific community during these two years of global pandemic.

Abstracts of the 6th Edition International Medical Students' Congress of Bucharest (IMSCB)

01. **CONSULTING DR. GOOGLE - THE QUALITY OF ONLINE MEDICAL INFORMATION REGARDING HYPERTENSION**

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INTRODUCTION: Hypertension represents a serious health issue. It can be considered both a disease and a risk factor for other pathologies (stroke, cardiac insufficiency, etc.). Taking into consideration that the general population has unlimited access to the Internet, it is mandatory for websites to contain proven, valid and high-quality information about this matter. **METHODS**: This observational, cross-sectional study included 25 Romanian and 25 English websites. Pre-established inclusion and exclusion criteria were used for sample selection. Credibility was assessed using 12 criteria based on the eEurope 2002 expert recommendations. Completeness and accuracy of information were evaluated using a quality standard based on information from literature and guidelines, reviewed by two cardiologists. The credibility, completeness and accuracy scores were rated on a scale from 0 to 10. Student t test and Mann-Whitney U were used to compare the two languages subsamples. Spearman and Pearson's tests were applied to test the correlations. The threshold for statistical significance was set at 0.05. **RESULTS**: The average credibility score was 4.7 for the Romanian websites and 5.6 for English websites (p=0.0686). The average completeness score was 3.7 for the Romanian websites and 5.3 for English websites (p=0.0007). The average accuracy score was 3.88 for the Romanian websites and 3.62 for English websites (p=0.5215). Significant moderate intensity correlation was found between the Google rank and the accuracy of the Romanian websites (r=-0.5438, p=0.0050). **CONCLUSION**: The overall quality scores of the Romanian and English websites presenting information about hypertension were modest. Although the completeness score of the English websites was above the score of the Romanian websites, the accuracy score was slightly higher for the Romanian websites. This study found a correlation between the Google rank and the accuracy score of the Romanian websites but since this was the only significant correlation found, it cannot be used as a general recommendation. Therefore, there is no significant advantage in knowing not only the Romanian language but the English language too, in terms of quality information found online about hypertension. The Google rank cannot be used as a quality indicator since there is no consistent correlation between it and the quality scores.

Key Words: Hypertension, Google, Online information, Accuracy, Completeness, Credibility.

02. **DETECTION AND DAMPENING OF CAFFEINE CONSUMPTION ON EEG RECORDINGS THROUGH QUALITATIVE ANALYSIS OF RELEVANT DATASETS**

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INTRODUCTION: Brain-computer interfaces (BCIs) manage to establish communication mediums between the central nervous system (CNS) and certain electronic devices. This paper aims to come up with ways to detect and tackle the effects of caffeine consumption on electroencephalography (EEG), which all too frequently lead to the nullification of sleep or epilepsy studies. **METHODS**: The COVID-19 pandemic has led to EEG laboratories being unavailable for the purpose of this study. Thus, the datasets needed for the development of the MATLAB pipeline have been selected from the scientific literature available, more precisely from an April 2020 study by Pradhan et al. **RESULTS**: For the purpose of automatic caffeine consumption detection, the algorithm developed is one of elegant simplicity. Caffeine's effects across the brain are non-uniform. These can be exploited through the use of ANOVA which is able to return a variance coefficient between the three regions with the biggest discrepancies in the changes of mean EEG values, thus demonstrating caffeine consumption. Filtering out the effects of caffeine consumption is of considerable complexity. The algorithm must first recognise that caffeine was consumed, which is done through the ANOVA method. The pipeline then correlates the variance coefficient to a factor of multiplication of an eigenvector such that the power of the EEG recording is increased in proportion to the consumed caffeine. **CONCLUSION**: Thanks to caffeine's resemblance to other compounds of the methylxanthine class, the algorithms presented in this work could be of use against theobromine's or theophylline's effects on the CNS. More work needs to be done with regard to the synergetic interactions between different psychopharmaceuticals, with special considerations given to the caffeine-l-theanine, caffeine-ethanol and caffeine-nicotine pairs. The end goal would be the creation of a global algorithm or pairs of algorithms capable of detecting any combination of psychoactive drugs (not just dual caffeine pairs) and tackle their effects on the BCI in question.

Key Words: Caffeine, EEG, MATLAB.

Abstracts

03. **THREE-DIMENSIONAL PATHOLOGY USING A MULTIMODAL MICRO-CT IMAGING STRATEGY**

Victor Gabriel Ungureanu[1], Daniel Anghel[2], Elisa Anamaria Liehn[2], Octavian Bucur[2,3].
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INTRODUCTION: Classical pathology involves examining multiple 2D microscopy slides. However, this planar approach fails to render the complete spatial configuration of pathological specimens. Developing on the micro-CT scan technique, an algorithm which is similar to classical CT scans, we propose an improved version which allows 3D reconstruction from sequential microscopy slides. Moreover, our mathematical representation allows us to concatenate multiple descriptors such as colour and fluorescent marker intensities in a compact and easy to understand representation. **METHODS**: Images of the whole tissue slides were acquired using the Aperio LV1 scanner, resulting in over 50 consecutive colon tissue sections and 20 carotid artery sections cut 50 µm apart, coloured with H&E. 20 more carotid artery slides had been stained for SMA (smooth muscle actin) and Mac2 (macrophage) markers. Their colour spaces were converted from RGB (Red Green Blue) to HSV (Hue Saturation Value). Noise filtering was applied by Gaussian blurring. Over-segmentation was performed using SLIC (Simple Linear Iterative Clustering), producing an intermediate model, refined using a region adjacency graph with a custom metric. An autoencoder was also compiled and trained on the same images. The final 3D model was built with the marching cubes algorithm. **RESULTS**: Segmentation results are similar for AI and parametric approaches. Compared to RGB, the HSV colour space is able to detect more subtle colour changes and results in a finer 3D reconstruction. We modelled a colon polyp and noticed that the mucosal and connective tissues were automatically segmented. We also modelled an atherosclerotic carotid artery. Our protocol was able to detect and classify the endothelium, arterial laminae, fatty plaque and inflammatory tissue from H&E and immunohistochemical stains. **CONCLUSION**: Pathological specimens were modelled using parametric and AI techniques. We obtained multimodal 3D representations of the studied samples as our protocol allows for multiple channels of data to be combined into one single representation. The final models can be used as input for more advanced machine/deep learning techniques. Investigating the 3D characteristics and features of human specimens can significantly impact entire fields, such as the diagnostic pathology and biomedical research.

Key Words: 3d pathology, Digital pathology, Diagnostic pathology, Image segmentation, Machine learning.

04. **THE ROLE OF ARTIFICIAL INTELLIGENCE ALGORITHMS IN SUPPORTING TWO-WAY COMMUNICATION BETWEEN DEAF-MUTE AND DOCTORS**

Enache Eduard-Cristian[1], Mihai Timus[1].
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INTRODUCTION: Artificial intelligence has changed, is changing and will change people's lives from the ground up. With the help of artificial intelligence technologies, new levels will be reached in medical research. In the context of our research, such an advanced level of research involves solutions aimed at reducing people's mental and/or physical deficiencies and speed up the networks of actors in the field of health. For this reason, the next decade will be decisive in the symbiosis between technology and people with disabilities, but especially between artificial intelligence and deaf-mute people. **METHODS**: Our research began with the identification of the most relevant studies in the field in order to structure a clearer picture of the use of artificial intelligence solutions in supporting people with disabilities, especially deaf-mute people. We searched for results using keywords such as \"machine learning\"; \"deep learning\"; \"\"deaf-mute\" and \"artificial -intelligence\", and then we chose the most relevant articles for our review so that it would be a useful source of concise information. This review summarizes the progress of the industry and artificial intelligence algorithms in an attempt to assist deaf-mute patients as much as possible. **RESULTS:** Some articles showed us the importance of training artificial intelligence algorithms, in order to perfect the translation and interpretation of hand movements (gesture recognition) in the medical context, and other articles showed us the social and psychological importance of such a system, when a deaf- mute can be independent and consult a doctor whenever needed, without help from the translator, the deaf-mute patient being almost completely independent. **CONCLUSION**: In modern times, we need more and more technology to overcome the linguistic barriers between sudo-mutes and doctors. With the help of new machine learning techniques, we can change the bidirectional communication between 2 worlds in an unprecedented way and we can expect a change in prophylaxis among people with hearing impairments, because they will be able to ask the doctor\'s opinion or as many times as needed.

Key Words: Artificial intelligence; Deaf mute; Machine learning.

05. **EVALUATING ANTICANCER DRUG ACTIVITY: MTT VERSUS CLONOGENIC ASSAY. ARE THE RESULTS MISLEADING?**

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INTRODUCTION: The main step of in-vitro cancer research is the cytotoxicity assessment of chemotherapeutic agents. Chemosensitivity assays evaluate post-treatment cell viability, either by the cells' ability to form colonies: clonogenic survival assay (CSA) or by their metabolic property of converting 3-[4,5-dimethylthiazol-2-yl]-2,5 diphenyl tetrazolium bromide (MTT) into purple-coloured formazan crystals. The measured outcome is a half maximal inhibitory concentration (IC50) value, that should theoretically be the same in both these tests. Realistically, scientists encounter discrepancies when correlating their results, hence we wonder: should we trust any of these assays?. **METHODS**: This review is based on 15 articles published from 1989-2022 and selected from PubMed and Google Scholar using the mentioned key words. The primary inclusion criterium was the existence of a comparison between CSA and MTT assay results (comparative studies or systematic reviews). While excluding any other types of non-clonogenic assays (biochemical, apoptotic or genotoxicity tests). **RESULTS**: A high correlation between MTT and CSA is mentioned in 7 out of the 15 articles. On the one hand, 4 studies recognise the advantages of the MTT assay: its simplicity, low cost, high reproducibility, shorter duration and lower requirements in plating efficiency. Even if 7 studies point out a higher sensitivity, these overestimated IC50 values are not confirmed by other methods. On the other hand, CSA gave the most reliable, dose-dependent index of cell lethality in 4 comparative studies, being able to identify not only cytotoxic but also cytostatic drug activity. However, one study marks its disadvantages as being timeconsuming and with no application on non-adherent cell lines. **CONCLUSION**: Both tests deserve their popularity amongst cancer-cell researchers, since they are a valuable tool for determining the IC50 of chemo or radiotherapy, which is the first step in discovering new tumour targeted treatments. With this common goal in mind, their indications must also be considered. Namely, using CSA for assessing long-term cell proliferation with high accuracy, and MTT only for obtaining numerous short-term treatment results.

Key Words: Cell viability test, Antineoplastic acitivity, MTT assay, Clonogenic assay.

06. **PULMONARY TUBERCULOSIS - RESEARCH PAPER**

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INTRODUCTION: One of the most studied contagious maladies is tuberculosis(TB) and its effects . Its wide spread across the globe grants pulmonary tuberculosis a particular spot in the scope of contagious maladies, this branch alone makes up to 90% of all tuberculosis cases. The purpose of this study is to identify and analyse the most important as well as the minor behavioural factors whose existence have the capacity to affect and influence the evolution of PT. Another objective is to outline the importance of risk factors associated with behaviour to help devise a new prophylactic approach with regard to PT. **METHODS**: Descriptive observational study in a transversal approach. A sample of 90 patients that were admitted at the "Marius Nasta" Institute of Pneumophysiology, between the 10th of June and 10th of August 2022 were subjected to an interview. **RESULTS**: Over 70% of the evaluated patients were heavy smokers (over 20 cigarettes/day). Up to 80% of the cases prophylaxis was inexistent. No apparent knowledge of past PT infections within their social groups. 3 times more patients are from rural areas than from urban areas . TB is twice as prevalent in men than in women . 94% of patients have a monthly income below 300 euros. **CONCLUSION**: Lack of prophylaxis associated with risk factors (smoking, HIV infections, diabetes, alcoholism, etc.) makes tuberculosis an endemic disease. Therefore, to help minimize the widespread impact and mortality due to infection, larger screenings of social groups and increased awareness are in need.

Key Words: Pulmonary Tuberculosis ; Factors of behavior ; Pathology correlation ; History ; Stop TB Strategy ; Risk factor.

Abstracts

07. ATHERODENT

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INTRODUCTION: This study focused on the function of periostin (Pn) and inflammatory biomarkers to evaluate the relationship between periodontal disease, systemic inflammation, and atherosclerosis. **METHODS**: The research included 92 individuals with acute coronary syndrome. The patient population was separated in to 2 groups based on the median value of serum Pn, which was 30.63. 46 patients in group 1 had low Pn levels, whereas 46 patients in group 2 had high Pn levels. **RESULTS**: Heart failure (p=0,002) and atrial fibrillation (p=0,005) were more common in the high Pn group, as well as STEMI type ACS (p=0,04). As seen by higher blood levels of CK-MB (p=0.009), myocardial necrosis was also more severe in the high Pn group, necessitating longer hospitalisation for these patients (p=0.008 forlength of stay in the hospital and p=0.004 for overall length of stay in the cardiac critical care unit). Serum albumin (4,08 0,34 mg/dl vs 3,08 1,46 mg/dl, p=0.02) and MMP9 (201 69,37 pg/ml vs 132,7 112,2 pg/ml, p = 0.003) levels were higher in patients from group 2. Additionally, individuals with high Pn levels showed higher levels of LDL cholesterol (p=0.0008) and tryglicerides (p=0.02), which implies a greater risk of cardiovascular disease. This suggests that greater serum levels of Pn are associated with elevated levels of MMP9, which are similarly linked to myocardial infarctions that are more severe. In patients suffering from severe kinds of ACS, red-complex germs (P. gingivalis, T. forsythia, and T. denticola) were detected more frequently than orange-complex germs (p=0,0008), and red-complex germs were correlated with a greater lymphocye-to-monocyte ratio (10.9 +/- 12.75 vs 3.2 +/- 1.44, p=0.01). **CONCLUSION**: Periostin, an inflammatory protein linked to periodontal disease, and the prevalence of red complex germs in the parodontal pocket are linked to an increased risk of acute coronary syndromes, particularly a more serious form of myocardial infarction.

Key Words: Periostin, Inflammation, Periodontal disease, Heart failure.

08. EVALUATION OF THE CORONARY ARTERY PLAQUE INFLAMMATION IN POST-COVID PATIENTS WITH THE HELP OF ANGIO-CT AND ARTIFICIAL INTELLIGENCE

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INTRODUCTION: This study is based on a novel parameter, the FAI score (fat attenuation index score) which assesses coronary inflammation with the help of artificial intelligence. The objective of this study was to explore the different characteristics of the FAI score in the case of individuals who, following a COVID-19 infection, were subjected to an AngioCT examination. **METHODS**: The study population consisted of 67 patients who presented to the hospital with angina and a coronary lesion. Patients were divided in two groups: group 1 consisted of 35 patients who had a COVID-19 infection a few weeks before the examinations, while group 2 consisted of 32 patients who had no previous COVID-19 infection. The 2 groups were gender-matched. The FAI score was determined for each patient included in the study. **RESULTS**: There was no relevant distinction of the FAI index between the two study groups (13.7 +/- 9.3 vs 13.6 +/- 13.0, p=0.06). Nontheless, it has been revealed based on the FAI analysis of the coronary fat distribution that patients previously infected with COVID-19 had a higher degree of inflammation in their right coronary artery compared to the left coronary artery. This difference was not significant in the case of patients from non-covid group. Statistically, in the COVID group right coronary FAI was calculated as 18.6 +/- 16.3, while left coronary FAI was determined to be of 11.1 +/- 10.0 (p=0.03). Additionally, in the case of patients who had not suffered previously a COVID-19 infection, a relevant distinction could not be established (16.1 +/- 12.0 versus 12.7 +/-7.4, p=0.3). **CONCLUSION**: Covid-19 infection is linked to a higher degree of inflammation which could lead to coronary plaque vulnerabilisation. The impact of local inflammation on plaque vulnerabilisation depends on local factors at the level of coronary arteries. This may be related to the different hemorheologic pattern of the right coronary artery flow, RCA being larger and having less branches than left coronary artery. The particularities of RCA flow make this artery more prone to plaque vulnerabilization as a result of a local inflammatory stimulus, as in COVID-19 infection. Furthermore, the fat attenuation index is a helpful way of prevention of early detection of an acute coronary lesion.

Key Words: Inflammation, COVID-19, Artificial intelligence, Fat attenuation index.

09. **TICAGRELOR DOWNREGULATES THE EXPRESSION OF PROATHEROGENIC AND PROINFLAMMATORY MIR125-B COMPARED TO CLOPIDOGREL**

Ewelina Błażejowska[1], Prof. Ceren Eylieten[1,2], Prof. Marek Postuła[1,2], Prof. Krzysztof J. Filipiak[3], Prof. Aleksandra Gąsecka[1].
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INTRODUCTION: Platelet P2Y12 antagonist ticagrelor reduces mortality after acute myocardial infarction (AMI) compared to clopidogrel, but the underlying mechanism is unknown. Because activated platelets release proatherogenic and proinflammatory microRNA-125b (miR125b) we hypothesized that the release of miR-125b is more efficiently inhibited by ticagrelor compared to clopidogrel. **METHODS**: We compared miR-125a, miR-125b and miR-223 concentrations and these miRNAs procoagulant activity in plasma of patients after AMI treated with ticagrelor or clopidogrel. After percutaneous coronary intervention, 60 patients with first AMI were randomized to ticagrelor or clopidogrel. The concentration of miR-223, miR-125a-5p, miR-125b was evaluated in platelet-depleted plasma using quantitative polymerase chain reaction at randomisation, after 72 hours and 6 months of treatment. Multiple electrode aggregometry using ASPI test and the ADP test was used to determine platelet reactivity in response to dual antiplatelet therapy. **RESULTS**: The expression of miR-125b was higher in patients with AMI at all timepoints from 24 hours to 6 months, compared to healthy volunteers (p=0.001). The expression of other miRNA subtypes did not differ between AMI patients and healthy volunteers. In patients who switched form clopidogrel to ticagrelor, expression of miR-125b decreased at 72 hours (p=0.007) and increased back to baseline at 6 months (p=0.005) . The expression of miR125a-5p and miR-223 was not affected by the switch from clopidogrel to ticagrelor. **CONCLUSION**: Ticagrelor attenuates the increase of mir-125b concentrations in plasma after acute myocardial infarction compared to clopidogrel. The ongoing release of mir-125b despite antiplatelet therapy might explain recurrent thrombotic events after AMI and worse clinical outcomes on clopidogrel compared to ticagrelor.

Key Words: ADP receptors; antiplatelet drugs; miRNA; platelets; ticagrelor.

10. **EYES ON PSYCHOLOGICAL TRAITS ETIOLOGY IN PRADER WILLI SYNDROME, A PAEDIATRIC CASE REPORT**

Al Krayem Feras[1], Chindris Sorina[1], Davitoiu Ana-Maria[1].
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CASE PRESENTATION: A male patient, at the age of 4 years old, diagnosed with PWS during the neonatal period was referred to the cardiology department of Victor Gomoiu Paediatric Clinical Hospital in 2019, for the investigation of an atrial septum defect. To note that the pregnancy had intrauterine growth retardation in the third trimester. The association of marked muscular hypotonia with elements of craniofacial dysmorphism raised the suspicion of PWS. Molecular analysis shows the characteristic genetic defect which confirms the diagnosis of PWS. Multidisciplinary evaluation of patient: 1) ENT consultation – nasal septum deviation, chronic hypertrophic rhinitis; 2) Cardiologic and Gastroenterology consultation – Within normal limits 3) Psychological consultation (QI/QD = 45-50) 4) Neurological consultation – neuromotor and language development delay. Mental retardation. Attention disorders. Hyperkinetic syndrome with aggressiveness. The paediatric sleep questionnaire scores 0.81 which represents a high risk for obstructive sleep apnea. It is decided to perform a full-night polysomnography which detects a severe form of obstructive sleep apnea syndrome. It is decided to initiate nocturnal non-invasive ventilation, CPAP therapy (10cm H2O pressure) throughout sleep period, along with growth hormone substition therapy. The patient is included in a cognitive behavioral therapy program. He is evaluated regularly, at intervals of one month, 3 months, 6 months. As an outcome, the mother admits the progress in the quality of sleep after 12 months of CPAP therapy, with significant improvement of the quality of life by having better relationship abilities and school performance. **BACKGROUND**: Prader Willi Syndrome (PWS) is an unusual genetic disease (1:12000 - 1:25000 live births) which is characterized by a variety of congenital abnormalities presented as short stature, neonatal hypotonia, childhood onset obesity, hypogonadism and craniofacial dysmorphism, along with developmental delay, behavioral problems and sleep-related respiratory disorders. **CONCLUSION**: Improvement in cognitive performance supported by increased QD has been observed in a patient diagnosed with PWS. Reducing hypoxia and improving sleep quality increase the quality of life and academic performance in the PWS patient noninvasively ventilated at home.

Key Words: Prader Willi Syndrome; Obstructive sleep apnea syndrome; Hyperkinetic syndrome; Polysomnography; CPAP (continuous positive airway pressure).

Abstracts

11. **SPINAL DURAL ARTERIOVENOUS FISTULA – A PATHOLOGY THAT SHOULD NOT BE OVERLOOKED**

Pisculungeanu Marian Andrei[1], Mara Moldovan[1], Alexandra Resiga[1], Sebastian Ștefan[1], Prof. Athena Cristina Ribigan[2], Florina Antochi[2], Prof. Cristina Tiu[2].
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CASE PRESENTATION: We present the case of a 43 years old man, with medical history of grade II arterial hypertension, admitted to the Neurology Department of the University Emergency Hospital Bucharest for muscle weakness of both lower limbs of progressive onset in the last 6 months. Neurological examination revealed spastic paraplegia, impaired superficial and deep sensation and urinary incontinence. The cervical-thoracic and lumbar vertebral-spinal MRI depicted serpiginous epidural flow-voids with intense gadolinium enhancement in the post-contrast phase, located predominately posterior in the inferior cervical, thoracic and superior lumbar (L1) segments, associated with a large edematous centromedullary hyperintense area on T2-weighted/STIR sequences, hypointense in T1- weighted images, and also, a slight T7-T12 enlargement of the spinal cord, suggestive for SDAVF. Digital substraction angiography of the spinal cord (catheterization of the right T6 intercostal artery) confirms the presence of SDAVF with a significant dilatation of the perimedullary venous plexus. Embolization with precipitating hydrophobic injectable liquid (PHIL 25%) is performed with complete obliteration of the fistula, without periprocedural incidents. The clinical evolution was favorable, with the improvement of the lower limbs muscle weakness (at discharge - 3/5 MRC), and of the sensory impairment. The patient was able to walk with bilateral assistance. **BACKGROUND**: Spinal dural arteriovenous fistula (SDAVF) is a rare disorder, but one of the most common arterio-venous malformation of the spinal cord. This type of malformation is characterized by abnormal direct connections between arteries and veins in the dura mater. The direct arterial inflow into the venous system induces increased pressure in the venous plexus with secondary venous congestion and intramedullary edema. Left untreated SDAVF is associated with an increased morbidity (quadri/paraparesis depending on its location, sensory changes and sphincter dysfunction). **CONCLUSION**: We chose to present the case of a patient with an interesting and often undiagnosed spinal cord pathology in order to emphasize the importance of an early diagnosis and treatment that may reduce the disability and, also, prevent irreversible neurological deficits.

Key Words: Spinal dural arteriovenous fistula; SDAVF; Digital substraction angiography; Embolization.

12. **AORTIC STENT GRAFT: A CASE REPORT**

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CASE PRESENTATION: We report the imaging aspects in a case of a 42 years old male pacient diagnosed with Stanford A type aortic dissection who underwent stenting of the ascending aorta, aortic arch, the proximal descending thoracic aorta and supraaortic vessels reimplantation. A dissection flap is present at the level of the descending and abdominal aorta, extending into the superior mesenteric artery and right renal artery, with thrombosis of the subprostethic segment. No perfusion deficit is present in the abdominal parenchima and the lungs are unremarkable. The angioCT examination following complex cardiovascular procedures remains a challenge due to particular post-procedural lesions. The computed tomography examination protocol should balance contrast volume, flow-rate and acquisition parameters to obtain the best image quality. We further discuss the current imaging challenges in such a case. **BACKGROUND**: Aortic dissection is a rare condition (5 to 30 cases per one million people per year), which occurs more frequent to men in their 60`s and 70`s. It is a condition that causes the rupture of intima which allows blood to penetrate and further separate the inner and middle layers of aorta. For an untreated dissection, the mortality rate is 25% in the first 6 hours and 50% by 24 hours. Chronic aortic dissection may lead to ischemic syndrome because of the low blood flow to organs (especially kidneys and intestines). **CONCLUSION**: We report on the radiological imaging aspects of a case of Stanford A dissection who underwent a complex combination of surgical and interventional procedures.

Key Words: Aortic Dissection Stanford A, Computed Tomography, Surgical and Interventional procedures.

13. LMNA CARDIOMYOPATHY AND THE MANAGEMENT OF THE ASSOCIATED LIFETHREATENING CONDUCTION ABNORMALITIES IN YOUNG ATHLETES

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CASE PRESENTATION: We present a case of a 45 years old male athlete who is dyslipidemic with no other cardiovascular risk factors. His family history is significant for a maternal diagnosis of nonischemic DCM. The patient presented with syncope preceded by fast palpitations. The cardiorespiratory physical examination was normal. The electrocardiogram (ECG) revealed a complete atrioventricular block (AVB). Echocardiography showed a dilated left ventricle and a decreased left ventricular (LV) ejection fraction (LVEF). Speckle tracking revealed physiological longitudinal strain but abnormal septal mid-ventricular radial strain. Late gadolinium enhancement (LGE) cardiac magnetic resonance imaging (MRI), demonstrated a dilated left ventricle with a decreased LVEF and mid-myocardial septal scarring. The para-clinical findings revealed DCM. Given the patient's family history, genetic testing was done revealing mutation in the LMNA gene. The final diagnosis was LMNA cardiomyopathy. **BACKGROUND**: Mutations in the LMNA gene lead to a specific phenotypic variation of dilated cardiomyopathy (DCM) known as "DCM with prominent conduction system disease." The conduction system abnormalities associated with LMNA DCM have an increased risk of sudden cardiac death (SCD). These conduction abnormalities necessitate a different approach to conduction abnormalities not associated with structural heart disease. **CONCLUSION**: In athletes presenting with complete AVB, multimodal evaluation is a necessity in order to eliminate the possibility of an underlying structural heart disease. Cardiac MRI plays a central role in revealing the presence of myocardial scarring, and it also reveals the possible aetiology for this scarring based on the LGE patterns. Since scar serves as a natural substrate for the development of ventricular arrhythmias, this finding justifies the placement of an implantable cardioverter defibrillator (ICD) in order to prevent SCD. In conclusion, meticulous evaluation of the underlying cause for the development of complete AV block in young patients is crucial, as this changes the treatment from DDD pacing to ICD implantation.

Key Words: LMNA Dilated Cardiomyopathy (DCM); Genetic testing; Cardiac Magnetic Resonance Imaging (MRI); speckle tracking echocardiography.

14. WHAT CAN BE HIDDEN BEHIND AN ANTERIOR CHEST PAIN

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CASE PRESENTATION: We report the case of a 61-year-old male patient, with no medical history, who was presenting for an anterior chest pain, which appeared suddenly during an effort, accompanied by palpitations, fatigue and dyspnea. The clinical examination revealed the presence of a systolic murmur graded 4/6, with maximum auscultation at the apex and radiation to the left axilla. The electrocardiogram showed only an extrasystolic arrhythmia and the chest X-ray was normal. The ecocardiographic evaluation established the diagnosis of severe posterior mitral valve prolapse, without any rupture, color Doppler revealing severe mitral regurgitation, a tricuspid valve prolapse, third degree tricuspid regurgitation and pulmonary hypertension. The transesophageal ultrasound confirmed the severe mitral valve prolapse. Given the clinical presentation, a coronary angiography was performed, showing the coronary arteries without hemodynamically significant lesions. The Holter ECG detected atrial fibrillation in 44% of the monitoring time. In this context, the possible causes of the anterior chest pain were: microvascular angina, traction on the chordae or pulmonary hypertension. Given the patient's age and the severity of the mitral regurgitation, he was referred to the cardiac surgery department, where he underwent the replacement of the mitral valve with a mechanical one. **BACKGROUND**: Mitral valve prolapse is the bulging of one or both of the mitral valve leaflets into the left atrium during the systole. Mitral regurgitation, if present, is generally mild and may results in a murmur. The cause of mitral valve prolapse is unknown, but is likely to be linked to heredity. **CONCLUSION**: The particularity of the case consists in the presence of a patient with severe mitral valve prolapse, totally asymptomatic until the moment of presentation, with an acute onset of the symptoms, but without rupture of chords or papillary muscles. Even if the mitral valve prolapse is 2 times more common in women, our patient was a man. Another peculiarity consists in the existence of paroxysmal atrial fibrillation detected on Holter ECG, considering that mitral valve prolapse is more frequently associated with ventricular arrhythmias.

Key Words: Mitral valve prolapse, Mitral regurgitation, Anterior chest pain, Atrial fibrillation.

Abstracts

15. **SLEEP EEG STUDIES HIGHLIGHTING THE DIFFERENCE BETWEEN FOCAL AND GENERALISED EPILEPSY**

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CASE PRESENTATION: The first patient, referred to as A.L., is a 16-year-old male with a history of seizures at 5-6 years of age that have been treated with Sodium valproate. After 2 years, the patient stopped the medication and had a period of 8 years seizure free. At around the age of 16, generalised seizure reoccur and he restarts the treatment without subsequent seizures. At this point, he presents for a sleep EEG study that shows few, short generalised epileptiform discharges. Following the EEG, the patient is advised that his condition is lifelong and that the medication should not be stopped. The second patient, referred to as M.V., is a 40-year-old male with a history of seizures starting at the age of 8. In the early stages of the disease the patient reported seizures manifesting with restlessness, facial rubefaction, verbal and gestural automatisms possibly along with a loss of awareness. Around the time of presentation, the seizures manifest with vertigo, cephalic sensation and manual automatisms (of a lower intensity due to treatment with Levetiracetam). The patient also complained of excessive daytime sleepiness. The study has confirmed a diagnosis of right frontal focal epilepsy with uncontrolled night-time seizures, explaining the daytime sleepiness. Imaging studies revealed a frontal focal lesion that has been removed surgically, making the patient seizure free.

BACKGROUND: Epilepsy is a neurological condition that results in the patient having a high risk of recurrent seizures. According to the Centers for Diseases Control and Prevention (CDC), in 2015, 1.2% of the US population, about 3.4 million people were suffering from epilepsy, making it one of the most widespread neurological disorders. Although it is true that this disorder can have many clinical and paraclinical manifestations, the following case study focuses on the differences between focal and generalised epilepsy in interictal sleep electroencephalographic (EEG) studies of two patients.

CONCLUSION: Prolonged sleep EEG studies are the cornerstone of epilepsy diagnostics and offer great insight into the type of seizures, the risk of reoccurrence and the recommended treatment.

Key Words: Sleep EEG; Epilepsy; Generalised epilepsy; Focal epilepsy; Seizure.

16. **PSYCHOGENIC NON-EPILEPTIC SEIZURES-HOW WE CAN DISTINGUISH THEM FROM EPILEPTIC SEIZURES**

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CASE PRESENTATION: The subject in this study is a 23-year-old Caucasian female who was admitted for a 12- hour video-EEG monitoring. The symptomatology onset in 2021 with a series of episodes of "seizure-like" activity on account of which she was diagnosed with epilepsy. Antiseizure medication was then initiated firstly with Oxcarbazepine, then with Zonisamide and Levetiracetam in adequate dosage due to recurring seizures. A history of psychotraumatic events during childhood was also reported. A 32-channel recording in the modified version of the 10-10 system was performed to evaluate wakefulness, sleep and reactivity using activation procedures, e.g. eye-opening, eye-closure and hyperventilation. After 2 minutes of the hyperventilation protocol the patient experienced repetitive involuntary movements of the upper right limb, followed by bilateral lower limbs in an asymmetric manner with unresponsiveness, clenched fists and closed eyes. Eye closure is not consistent during epileptic seizures, but has been found to be a reliable sign for PNES. The event lasted 90 seconds after which the patient regained responsiveness to external stimuli. There were no persistent neurological deficits present at the end of the event. The electroencephalography showed no epileptiform discharges in the course or before the seizure, but a regular alpha rhythm which is never found during a generalized tonic-clonic seizure. Follow-up medical recommendations included gradual reduction of medication, psychiatric observation and cognitive behaviour therapy.

BACKGROUND: Psychogenic Non-Epileptic Seizures (PNES) are paroxysmal episodes of altered behaviour resembling epileptic seizures but lacking the excessive synchronous cortical electroencephalographic activity. The aim of this case report is to present the difficulties of differential diagnosis between epileptic seizures and PNES. **CONCLUSION**: Although PNES and epileptic seizures may look similar upon first examination, the differential diagnosis can be achieved by observing the semiology and case history more critically and through vEEG studies.

Key Words: PNES; Electroencephalogram; Seizure; vEEG.

17. A CASE OF KAPOSI´S SARCOMA ASSOCIATED WITH HIV INFECTION

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CASE PRESENTATION: We present the case of a 37-year-old heterosexual male patient with a 1-month history of asymptomatic skin eruptions. Lesions first appeared on the face and later on the upper limbs. Dermatological examination showed multiple, well-defined, non-scaly, violaceous skin lesions in patches as well as plaques of variable size disseminated at the facial level, upper limbs, and oral mucosa, which led to the diagnosis of KS. It is also important to report that the patient has a twin brother known to suffer from AIDS. On further inquiry, there was a medical record of fever, dry cough, and weight loss. Laboratory investigations showed severe anemia and the chest X-Ray revealed pulmonary tuberculosis. ELISA tests and Western-Blot for HIV were positive, while serology tests for hepatitis B and C, toxoplasmosis, and cytomegalovirus were negative. (CD4 count was 171 cells/mm³ and ARN-HIV was 1160000 copies/mm³). Oral exfoliative cytology was performed and revealed a fungal infection with Candida albicans. The optimal treatment for AIDS-related KS is be chosen based on clinical staging, being proven that highly active antiretroviral therapy (HAART) is the most efficient. **BACKGROUND**: Kaposi´s sarcoma (KS) is a multi-focal vascular neoplasm that usually appears on the skin, but can also involve other organs. The underlying cause of Kaposi\'s sarcoma is the infection with a virus called human herpesvirus 8 (HHV-8). It is the most common neoplasm in patients with acquired immunodeficiency syndrome (AIDS), occurring in up to 65% of cases. **CONCLUSION**: Clinically, AIDS-related KS differs from its classical form. In these immunocompromised patients, KS behaves more aggressively, often involving mucosal tissues such as the oral, genital, or ocular mucosa. It is of great significance to understand the relation between HIV and HHV-8-infection regarding disease onset, while clinical presentation is important to raise awareness of KS and ensure appropriate management of affected patients.

Key Words: HIV, AIDS, Kaposi's sarcoma, HAART.

18. EXTRACORPOREAL MEMBRANE OXYGENATOR (ECMO) IN SEVERE ACUTE RESPIRATORY DISTRESS SYNDROME (ARDS): A SYSTEMATIC REVIEW

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INTRODUCTION: ARDS is a respiratory disorder with a complex etiology, characterized by acute onset of respiratory insufficiency with reduced lung compliance. Veno-venous-ECMO (vv-ECMO) is used as an adjuvant therapy in severe ARDS with refractory hypoxemia, aiming for an effective lung protection. The objective of this review is to present the outcome of vv-ECMO in severe ARDS patients. **METHODS**: PubMed articles between 2009-2021 were reviewed, including original studies and systematic reviews, regarding vv-ECMO in patients associating ARDS. Comprehensive searches were made using the following keywords: vv-ECMO, severe ARDS, respiratory insufficiency. Inclusion criteria were early mortality and morbidity rates. Exclusion criteria were patients <= 18 years old and patients with contraindication to heparin. Limitations of this review are the small group randomized trials. Bias risk was not evaluated and PRISMA guidelines were used for data synthesis. **RESULTS**: ECMO to Rescue Lung Injury in Severe ARDS (EOLIA) trial revealed a reduction in 60-day mortality with ECMO: 35% vs. 46% in the control group in a 249 patients trial (124 – ECMO, 125 – conservative treatment). Conventional Ventilator Support vs Extracorporeal Membrane Oxygenation for Severe Acute Respiratory Failure (CESAR) trial described similar results regarding short term mortality (37% in the ECMO group vs. 53% in the control group; p=0.03), although 6 month mortality was not significantly reduced (37% vs. 45%; p=0.07). Tsai and Chang et al observed that the ECMO group exhibited lower mortality than did the non-ECMO group (55% versus 65.1%). **CONCLUSION**: Vv-ECMO in severe ARDS patients is associated with satisfying outcomes regarding short term mortality and morbidity in highly selected groups. Further studies should be conducted for a fully understanding of the ECMO benefits in severe ARDS patients.

Key Words: vv-ECMO; ARDS; Respiratory insufficiency.

Abstracts

19. BED-TIME STORY OR PATHOLOGY: CAN WE HAVE A BROKEN HEART?

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INTRODUCTION: Takotsubo Cardiomyopathy (TC) is a clinical entity caused by emotional distress. The left ventricle (LV)becomes shaped like a Japanese octopus trap with a round bottom and a narrow neck due to the ballooning of the apex. This study aims to show that because of its similar symptoms with the acute myocardial infarction (AMI), TC is often misdiagnosed and inappropriately treated. **METHODS**: This study is based on 12 articles published between 2012-2022, regarding the clinical manifestations and paraclinical investigations of over 10.000 patients of different ages and sexes admitted with chest pain, bradycardia and dyspnea due to exaggerated effort or sudden experienced trauma. Through further medical testing, involving ECG, echocardiogram, angiography and hormonal examination, the patients from the 2 groups: TC and AMI, could be clearly differentiated based on the results. **RESULTS**: It was proven that TC usually occurs in postmenopausal women, 90% of all reported cases being on women ranging 58-75 years old, with only <3% of patients under 50. The TC patients show no specific cardiac history or current condition associated to this pathology. ECG abnormalities are similar with AMI such as ST-segment elevation and QT prolongation. Coronary angiography is negative for TC, although for AMI it shows significant stenosis or lesions. Cardiac markers such as troponins or BNP show no consistent pattern. However, catecholamines levels are 2-3 times higher among patients with TC comparing to AMI. Echocardiograms are a hallmark for diagnosing TC because of the hyperkinetic LV base, midventricular hypokinesis and apical akinesis causing marked apical ballooning and reducing the ejection fraction severely. The treatment for TC should include both heart-failure drugs (nitrates, diuretics, beta-blockers, angiotensin blockers, aspirin) but also psychosocial support along with anxiolytics. The overall prognosis is favorable because of its reversibility, the mortality rates being up to 8% if treated correctly. **CONCLUSION**: As shown in previous studies, the Broken-Heart syndrome is a life treating pathology which can be confused with AMI (similar ECG and pain manifestation). By taking a multidisciplinary approach (echocardiogram, angiogram, psychiatric exam) TC can be understood and diagnosed correctly.

Key Words: Takotsubo Cardiomyopathy; Broken-Heart Syndrome; Apical Ballooning; Stress-Induced Cardiomyopathy.

20. EXTRADIGESTIVE MANIFESTATIONS IN INFLAMMATORY BOWEL DISEASES

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INTRODUCTION: Inflammatory bowel diseases (IBD) are a group of autoimmune intestinal conditions, the most common of them being Crohn\'s disease (CD) and ulcerative colitis (UC), with a growing prevalence. The cause of these two are yet to be fully understood, some of the theories being the population of bacteria in the bowel that keeps the cells of immune system alert and misconduct them to attack self cells. Mutations in several genes (coding for NOD2 and HLA) were discovered too. Clinical manifestations include fatigue, reduced appetite, abdominal pain, bloody diarrhea, but sometimes unexpected extradigestive symptoms and signs are noticed. **METHODS**: Ten PubMed studies from 2016 to 2022 were considered for this review. The eligibility of selected articles was analyzed based on criteria such as the type (original, clinical studies; reviews were rejected), the prevalence of the extradigestive manifestations and the diversity of them. The rejected studies lacked the inclusion criteria or did not concentrate specifically on the extraintestinal aspects. Bias risk was not evaluated and PRISMA guidelines were used for data synthesis. **RESULTS**: The extradigestive manifestations in IBD are numerous, aiming other systems of organs such as dermatological complications (erythema nodosum, pyoderma gangrenosum, psoriasis, aphthous stomatitis) and rheumatologic complications, like peripheral arthritis, with autoimmune etiology as well. The articles suggest that the frequency is between 15- 30% in CD and UC and it is more common for CD than for UC. The connection between IBD and rheumatologic inflammatory diseases is based on the genetic similarities regarding mutations of HLA-B27. Other complications are related to the respiratory system, such as bronchial inflammation and suppuration and pulmonary nodules, based on the resemblance of the immune systems in pulmonary and intestinal mucosa. Perianal fistulas, ocular complications, vasculitis, venous and arterial thrombosis were also reported. **CONCLUSION**: The IBD are a wide topic that continues to raise questions, especially because of the differences in manifestations from one patient to another. The focus on the extradigestive implications is motivated by their variety and could be an index for the cause and future treatments. Moreover, they put on display our rudimentary knowledge regarding autoimmune conditions.

Key Words: Inflammatory bowel diseases, Crohn\'s disease, Ulcerative colitis, Extradigestive manifestations.

21. **IMIDAZOLINE SYSTEM'S POTENTIAL INVOLVEMENT IN TREATING BRAIN DISORDERS AND ENHANCING COGNITIVE FUNCTIONS**

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INTRODUCTION: Imidazoline receptors were first mentioned in 1984. Since then, studies have shown this system's involvement in regulation of blood pressure, anti-inflammation, hyperglycemia, antitumor activities and cognitive functions. There are known 3 types of imidazoline receptors: I1, I2 and I3. This review's purpose is to show imidazoline agents' role in cognitive functions in rats and this system's therapeutic potential in brain disorders. **METHODS**: A literature study using Pubmed and Google Scholars databases with the combination of words "idazoxan\" or "efaroxan\" and "cognitive function\", was used for the purpose of this review. The articles between 2000 and october 2022 were selected. **RESULTS**: Most of the studies analyzed in this review showed that the use of imidazoline receptors antagonists- efaroxan and idazoxan- enhanced the cognitive functions of rats such as short-term memory retention, discriminative spatial learning and long-term memory. Their use also revealed sedative effects and decrease of anxious behaviour. Another agent- an endogenous agonist of imidazoline receptors called agmatine presented antidepressant-like action and anti-compulsive-like effect in animal models. These effects were completely blocked by idazoxan and efaroxan, suggesting the involvement of imidazoline receptors in anxiety and obsessive compulsive disorders. **CONCLUSION**: Neuro-pharmacological studies on animal models demonstrate the potential therapeutic effect of imidazoline system and its agents on brain disorders. Even though their effects on humans is yet to be demonstrated, progress in this direction was made in the last 3 decades.

Key Words: Imidazoline receptors, Idazoxan, Efaroxan, Brain disorders, Cognitive function.

22. **MUCOSAL MELANOMAS WITH UROGENITAL LOCALIZATION**

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INTRODUCTION: Extracutaneous melanomas have a complex clinical presentation, but these aggressive tumors have a poor prognosis. Only 4-5% of all primary melanomas do not arise from the skin. The five-year overall survival rate of vulvar melanoma is 47% compared with 92% for cutaneous melanoma. Compared to skin melanomas, melanomas with urogenital localization are associated with a poor prognosis resulting from delayed diagnosis and different tumor biology, treatment strategies, and treatment response. **METHODS**: For this study, I used eight articles from https://pubmed.ncbi.nlm.nih.gov/ and Fitzpatrick's Dermatology textbook. The papers are ranging from 2003 to 2021. **RESULTS**: Only 1,3% of melanomas occur on mucous membranes, out of which 18% are on female genital mucous membranes, 23,8% in the anal/rectal region, and 2,85% on urinary mucosa. The 5 years survival rate for melanomas in patients treated with surgical resection alone in the female genital region is 11% and in the anal/rectal region is 20%. Novel treatment modalities include checkpoint inhibitors and targeted therapies. **CONCLUSION**: The etiology of mucosal melanomas remains unknown. Wide excision surgery is the treatment of choice. The effect of adjuvant therapy on survival remains questionable due to limited knowledge. Radiotherapy seems to give better local control. The overall fiveyear survival rate for mucosal melanomas is 0-45%. Recent data indicates that this may be improved by immunotherapy in the years to come.

Key Words: Mucosal melanoma, Treatment, Prognosis, Vulvar melanoma, Urethra.

Abstracts

23. SPLENIC HYDATID CYST: OPEN OR LAPAROSCOPIC APPROACH?

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INTRODUCTION: Hydatid disease is endemic in farming areas, but occurs worldwide. The most common site of disease is the liver, followed by the lungs, kidney, bones and brain. Other sites such as the heart, spleen, pancreas and muscles are very rarely affected. Up to 4% of instances of abdominal hydatid disease have reportedly been linked to splenic hydatid disease. Clinicians may encounter diagnostic difficulties due to the rarity of splenic hydatid disease, particularly in nonendemic regions. The purpose of this research is to describe the epidemiologic characteristics, diagnostic techniques, and treatment options of this illness. **METHODS**: We performed a retrospective study of 28 patients operated on by open and laparoscopic approach for a splenic hydatid cyst between January 1990 and December 2017 in the First Surgical Clinic of \"St. Spiridon\" University Hospital of Iași with the aim of presenting the latest updates regarding the diagnosis methods and therapeutic procedures. For this we evaluate the demographic data, localization, diagnosis, treatment methods, and the length of postoperative hospital stay of the patients. **RESULTS**: Our retrospective study group included 16 women and 12 men with a mean age of 47.82. Most patients were from rural areas (82.1%), the occupational hazards being frequently involved in the etiopathogenesis of the disease (35.7%). 11 patients had multiple organ involvement, while 17 patients only had splenic involvement. Left quadrant pain of varying intensity, radiating to other areas or not, was the most prevalent and early symptom. On physical examination, 12 patients had splenomegaly. In all cases, an ultrasound and CT scan revealed a splenic cystic mass. In conclusion, 26 splenectomies and 2 conservative spleen procedures were conducted on all patients during operations using the laparoscopic approach in 6 cases and the open approach in 22 cases. Due to close adhesions with surrounding organs, laparoscopic procedures can sometimes be challenging. **CONCLUSION**: Splenic hydatid cysts are rare, being more common in endemic regions; our region has a low prevalence of these cysts. The splenic hydatid cyst may become a challenging surgical problem. Individual management is required. In some circumstances, a laparoscopic approach is suitable.

Key Words: Splenic hydatid cyst; Splenectomy; Laparoscopy.

24. 5 YEARS EXPERIENCE IN PEDIATRIC SPLENIC TRAUMA

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INTRODUCTION: Child trauma represent nowadays a leading cause of mortality. For children with mild trauma who are clinically stable, FAST is enough for the evaluation. **METHODS**: 312 children admitted between 2017-2022 in our department, had been retrospectively examined, regarding blunt abdominal trauma. The physical exam findings, radiologic imaging, as well as our clinical and surgical approach of the spleen, pancreas, small intestine and kidney trauma were taken into consideration. In this study we focused on splenic trauma. Management options were nonoperative, splenorraphy and splenectomy. Patients under 18 years old with registered splenic injury were identified. **RESULTS**: The most relevant causes of child abdominal trauma were motor vehicle accident (18), falls from height (6), fall from a trampoline (1) and aggression (1). We have performed CTscan in only 10 of our patients. The average age concluded from our study is 11 years 4 months and the average hospital admission was 14,076 days (1-84 days). From a total of 312 children with multiple trauma injuries, 84 had liver injury, 26 splenic, 20 renal, 9 pancreatic, and 5 small intestine injuries. From the patients with splenic trauma, 10 patients underwent surgical treatment (6 patients had emergency splenectomy, 4 splenorraphy), 9 patients benefited from non-operative treatment, and the rest of 7 had others surgical procedures. Due to multiple severe trauma injuries, 2 patients have lost their lives. **CONCLUSION**: The optimal surgical approach, should take into consideration injury severity, hemodynamic status of the patient, and associated lesions. Abdominal CT scan should be performed if FAST ultrasound is inconclusive. Although the gold standard of splenic lesions is nonoperative treatment, the pediatric surgeon should be always ready for surgical intervention.

Key Words: Pediatric splenic trauma; Splenectomy; Splenorraphy.

25. A 20-YEAR STUDY ON THE TREATMENT OF PERITONEAL HYDATID CYSTS

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INTRODUCTION: The hydatid cyst is a parasitic infection produced by cysts comprising Echinococcus granulosus larval stage. Primary peritoneal hydatidosis is extremely rare (2% of all intra-abdominal hydatid diseases). Peritoneal hydatid disease is secondary to liver or splenic involvement following spontaneous rupture or accidental spillage during surgery. **METHODS**: We performed a retrospective study based on the database analysis of Clinic I Surgery of the Hospital Emergency University \"St. Spiridon\" from Iași, regarding patients with peritoneal hydatid disease confirmed by imaging, clinically and histopathologically, operated in the period 1991 - 2021, including all medical files. We analyzed the clinical, paraclinical, the anatomical-pathological aspects, the therapeutical modalities and the results of the applied treatment. **RESULTS**: Between 1991 and 2021 a total of 18 patients were operated for primary (3) or secondary peritoneal cysts (15). During the same period, 1002 cases of hydatid cyst with various locations were treated in the Iași Surgery Clinic: 805 abdominal (714 hepatic, 43 splenic, and 18 peritoneal) and 197 extra abdominal (thoracic, cervical, muscular, retroperitoneal, etc.). The incidence of hydatid disease has decreased over time from 35 cases per year to 18 cases per year. In the year of the COVID pandemic (2020) the incidence decreased to 10 cases per year. Most of the patients with peritoneal hydatidosis were asymptomatic or had atypical symptoms. Open surgery was the procedure of choice (16 cases) with conservative (13 cysts) and radical (3 cysts) methods. The laparoscopic approach was performed in 2 cases of primary peritoneal hydatid cysts. Antiparasitic treatment with Albendazole (Zentel, 400 mg tablets.) was administered to all patients. Total daily oral dose of the drug varied between 600 and 800 mg, in two divided doses. It was administered preoperatively for 5 days and postoperative for two months, and resumed in case of relapse. **CONCLUSION**: Surgery was the preferred treatment in larger cysts. Complete excision of the cyst without leakage or rupture, the ideal method, was not always possible. Albendazole treatment can either be used alone in small cysts to stop the evolution, or as adjunct to surgery. Patients should be followed long-term to track relapses.

Key Words: Hydatid cyst, Antiparasitic treatment.

26. CASE REPORT: ACUTE UPPER LIMB ISCHEMIA POST SARS-COV2 INFECTION

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CASE PRESENTATION: We present a case of a 71 year old female who developed acute left hand pain on the day of discharge from an Infectious Disease Hospital where she had been an inpatient with severe SARS-Cov2 infection. Other comorbidities included obesity, arterial hypertension and she was also recently treated for Clostridium colitis. On laboratory results, white blood cell count was elevated to 12.09 x1000/uL (NR 4.0-10.0 x1000/uL) and C-reactive protein was 3.68 mg/dl (NR 0-0.5 mg/dl) while others were within the normal limit. A CT angiogram was performed showing thrombus in the left brachial artery with complete occlusion of the radial and cubital arteries. A thrombectomy was performed and intravenous heparin therapy was given. On the second postoperative day, the patient developed new signs of acute limb ischemia. Repeat thrombectomy with clearance of the palmar arch was performed with a Fogarty catheter and the artery was closed with a vein patch from the basilic vein. Again continuous intravenous heparin therapy was given, with careful monitoring of the activated partial thromboplastin time (aPTT). Unfortunately, she again developed signs of limb ischemia requiring a third reintervention; further thrombectomy was performed with the extension of the patch closure and postoperatively she was started on aspirin and continued on heparin infusion with no other embolic events. **BACKGROUND**: Acute upper limb ischemia manifests as an acute onset of pain secondary to occlusion of arterial blood supply. Rapid recognition of ischemia signs is mandatory to prevent limb loss and life-threatening morbidity. Infection with COVID-19 has been proven to increase the risk of embolic events with venous thromboembolism occurring more frequently than arterial embolism. **CONCLUSION**: COVID-19 infection results in endothelial damage, hypercoagulable states and an overall increased inflammatory status which can persist beyond the initial infection and play a role in inducing arterial ischemia. In this case immediate postoperative administration of antithrombotic and anticoagulant therapies, while considering the risk of bleeding, was mandatory to reduce the risk of reintervention and morbidity.

Key Words: Acute limb ischemia; Post SARS-Cov2 infection; Thrombectomy.

Abstracts

27. UNEXPECTED AND RARE CLINICAL RESPONSE AFTER STIMULATION OF STEREO-EEG ELECTRODES

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CASE PRESENTATION: Clinical case: 31 years old female patient, with refractory focal epilepsy that started at 24 years of age. The refractory epilepsy evaluation showed: video-EEG with ictal pattern starting in right frontal lobe and propagation to the right temporal region followed by generalization; Brain MRI without lesions; PET with right temporal mesial hypometabolism and neuropsychology with minor impairment of visual memory. At the time of admission, she had a frequency of 3 attacks per month. A pre-surgical evaluation was initiated. A stereo-EEG was performed with implantation of 10 deep electrodes, covering right frontal and temporal lobes. During stereo-EEG monitoring, with anti-epileptic drugs reduction, several electroclinical seizures were recorded. Electrode stimulation triggered electrical seizures in the body of hippocampus and paresthesia in the right periorbital region with stimulation of the deepest contacts of temporal basal electrode. No cranial base defects were identified. This is a rare effect of electrode stimulation; previous reports described painful manifestations, but not isolated sensory symptoms. After completion of monitoring electrodes were removed without complications. **BACKGROUND**: Epilepsy is one of the most serious neurological conditions. Patients with refractory epilepsy have disabling seizures despite taking antiseizure medications. When non-invasive studies aren't enough to identify the seizure onset zone, invasive EEG studies, as stereo-EEG, may be indicated. In approximately 30% of patients with epilepsy, epileptic seizures will be refractory to monotherapy treatment. **CONCLUSION**: Invasive EEG studies, like SEEG are required in the diagnosis and treatment of some refractory epilepsy patients. The stimulation of the SEEG eletrodes can generate some unexpected clinical responses and these are a learning opportunities to find anatomo-clinical explanations.

Key Words: Refractory focal epilepsy, Stereo EEG, Frontal lobe, Temporal lobe, Electrode stimulation, Trigeminal nerve, EZ – epileptogenic zone.

28. TWO PATELLAS OR AN UNIDENTIFIED TUMOR?

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CASE PRESENTATION: A 74-year-old female patient is admitted to a clinic, reporting mechanical pain in the left knee, with a diagnosis of advanced osteoarthritis in view of total knee arthroplasty. Imagistic examination (X-ray, ultrasound, and computer tomography) disclose the presence of an infrapatellar calcified formation of 50/40/15 mm that tightens the patellar tendon in the middle portion reducing its thickness to 2.5 mm, compared to the contralateral patellar tendon (4 mm). The case was treated surgically by total excision of the infrapatellar tumoral formation and total knee arthroplasty with cemented stabilized posteroprosthesis. The mass of infrapatellar calcified formation was found extra-capsular and it was adjacent to the patellar tendon. Following the anatomopathological examination, the diagnosis was osteochondroma of the infrapatellar fat. The recovery of the patient was favourable, without further complications (extensor mechanism failure) with good recovery of the articular mobility (Flexion = 100° and Extension = 0°). **BACKGROUND**: Paraarticular osteochondromas are rare osteocartilaginous tumors that arise in the soft tissue adjacent to a joint. One case of grade 4 osteoarthritis (Kellgren & Lawrance) and grade 2 genu varum associated with an infrapatellar Hoffa fat tumor formation arising in a 74 years old patient will be reported in this study. **CONCLUSION**: Patients suffering from osteochondroma were known to be asymptomatic for a long time, and their tumour can be identified after a routine X-ray. The infrapatellar localisation and large osteochondroma tumours are very rare, having a major impact on the degenerative evolution and mobility of the knee. Therapeutical treatment should implement both tumoral and osteoarthrosis surgical treatment.

Key Words: Para-articular osteochondroma, Infrapatellar fat, Osteoarthritis, Total knee arthroplasty.

29. **MICROSURGICAL TREATMENT OF A DURAL ARTERIOVENOUS FISTULA - A PATIENT-TAILORED APPROACH**

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CASE PRESENTATION: We present the case of a 61-year-old male patient that had an episode of generalized seizure two weeks before hospital admission. The patient was known with arterial hypertension and no other significant comorbidities. The neurologic exam revealed no deficits. Imaging studies, CT and MRI with angiography sequences, revealed a left frontal vascular malformation with calcifications and a small quantity of subacute blood surrounding the lesion. Furthermore, a digital subtraction angiography confirmed the diagnosis of a left frontal dural arteriovenous fistula, with arterial feeders from the left and right middle meningeal arteries and also from the branches of the left anterior cerebral artery. The venous drainage was in the superior sagittal sinus. The patient underwent surgical resection of the dAVF through a left frontal approach. Intraoperative neuronavigation and ultrasound were used in order to guide the trajectory and identify the vascular structures. The dAVF was completely resected under the surgical microscope. The diagnosis was validated by the histopathological exam. Postoperative imaging studies confirmed the complete resection. Postoperatively, the patient presented no neurological deficits, having a good recovery and good seizure control. **BACKGROUND**: Dural arteriovenous fistulas (dAVFs) are rare vascular malformations, representing abnormal arteriovenous shunts between the dural vessels. Given their unclear etiology and high hemorrhagic risk, patients are usually diagnosed following the rupture of the dAVF, most commonly in their sixth or seventh decades of life. **CONCLUSION**: While the actual trend is towards the extensive use of endovascular treatment of dAVFs, there are cases when the anatomic constraints limit its role. Hence, microsurgical treatment is still recommended, and the particularities of every patient should determine the treatment plan. The clinical case presented here confirms that microsurgical resection can completely and safely remove a dAVF from the circulation, with a favorable clinical outcome.

Key Words: Dural arteriovenous fistula, Microsurgical resection, Hemorrhagic risk, Digital subtraction angiography.

30. **MULTIPLE PROFILERATING TRICHILEMMAL CYSTS OF THE SCALP: A CASE REPORT**

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CASE PRESENTATION: We present a case report of a 78-years-old female patient who has entered the Neurosurgery clinic of "St. Marina" University Hospital with clinical manifestation of rapidly growing from several months subcutaneous formation on the head and the presence of two smaller ones. MRI scan discovered three subcutaneous tumor formations suspicious for proliferating trichilemmal cysts, one of which was gigantic in size. After clinical discussion, under general anesthesia an operative treatment was performed with total extirpation of the cysts. Postoperatively, surgery-related complications were not observed. The patient was mobilized and verticalized on the day after intervention and discharged on the 5th day. As a result, a good cosmetic effect was obtained. **BACKGROUND**: Proliferating trichilemmal cyst, also known as proliferating pilar scalp tumor, is a rare benign tumor of the hair follicle. While trichilemmal cysts are common intradermal or subcutaneous cysts, occuring in 5-10% of the population, only 2% will develop into proliferative trichilemmal cyst. The differential diagnosis should include lesions such as malignant proliferating trichilemmal tumor and squamous cell carcinoma. Surgical treatment is the only effective method for treating these rare cysts. **CONCLUSION**: Proliferating trichilemmal cyst is an uncommon neoplasm, and reporting of these lesions are important due to the good clinical evolution compared to the malignant macroscopic and microscopic feature of these tumor formations.

Key Words: Trichilemmal cyst, Proliferating, Scalp, Tumor trichilemmal.

Abstracts

31. BILATERAL GIANT OVARIAN SEROUS CYSTADENOMAS IN A POSTMENOPAUSAL WOMAN: A RARE CASE

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CASE PRESENTATION: A 66-year-old woman was referred to our surgical department with abdominal distension. Ultrasound and computed tomography found a giant cystic mass occupying the whole abdomen. A laparotomy was performed and revealed two giant cysts; one attached to the right ovary measuring 60cm at its greatest diameter, and another on the left ovary with a greatest diameter of 40cm. The ovarian cysts were removed with a total hysterectomy. A histological examination revealed ovarian serous cystadenomas. The woman was discharged, and on follow-up two years later, reported no problems. **BACKGROUND**: Benign serous tumors of the ovary account for 16% of all ovarian epithelial neoplasms. They are bilateral in 10 to 20% of cases. We aim to present a case of a postmenopausal woman with bilateral giant ovarian serous cystadenomas. **CONCLUSION**: This case presents one of the largest ovarian cysts reported in the literature, what is more, no other reports of giant bilateral serous cystadenomas were found during our literature search.

Key Words: Serous cystadenoma, Giant ovarian cyst, Bilateral ovarian cysts.

32. DIBUCELL ACTIVE BIODEGRADABILE DRESSING – A NEW ERA IN TREATMENT OF CHRONIC VENOUS ULCERS

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CASE PRESENTATION: The effectiveness of the DibuCell Active dressing was evaluated based on the analysis of results obtained during the prospective study that was conducted on 5 patients with venous trophic ulcers, associated with hypertension, treated in Septic Surgery Department (IMU) during 2021. Totally, patients had 9 ulcers. Patient selection criteria: active venous ulcer, adults > 18 years, administration of topical treatment. The treatment with DibuCell Active was performed according to the scheme proposed by the manufacturer without any other local treatment. The dynamics of epithelialization of the ulcers and duration of treatment was analysed. The surface dynamics of ulcers was evaluated by using computerised analysis of digital images according to the ImageJ program. The patients were divided into 3 groups according to the duration of treatment and the size of the ulcer. **BACKGROUND**: Venous trophic ulcers are late manifestations of chronic venous insufficiency that is associated with a significant reduction in quality of life. The elderly are affected in 0.3- 1% of cases. As the global population becomes older, the disease has shown a worldwide growing incidence. This, reviews the diagnostic and therapeutic approach for venous trophic ulcers and requires a multidisciplinary approach. Epithelization was completely, duration of treatment depinded on ulcer surface: I group (ulcer < 5cm2) complete epithelialization in 20 days – 2; II group (ulcer – 5-10cm2) complete epithelialization in 30 days – 2; III group (ulcer >10cm2) complete epithelialization in 90 days – 1. Addition of the DibuCell Active dressing to the topical therapy favorised the therapeutic efficacy. **CONCLUSION**: The new therapeutic approach in the control of chronic venous ulcers the biodegradable dressing DibuCell Active has a major effectiveness by increasing epithelization and reducing the duration of treatment. This minimizes the traumatization of newly created tissues and facilitates and simplifies the treatment process. Our study showed that addition of the DibuCell Active dressing to topical therapy increases the therapeutic efficacy of the treatment of ulcers occurring during the chronic venous insufficiency patients treated for chronic wounds.

Key Words: Chronic venous ulcers, Treatment, DibuCell Active.

33. **THE MANAGEMENT OF A MESOBLASTIC NEPHROMA**

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CASE PRESENTATION: A 2 year-old male patient was admitted to "Sf. Maria" Children's Hospital from Iași in February 2022 with a preliminary diagnosis of right kidney nephroblastoma. He presented with diffuse abdominal pain, abdominal distension, and hematuria. Abdominal CT Scan identified a right kidney tumor-like mass measuring 16, 47/ 11, 68/ 16, 66 cm, with a heterogenous consistency and necrotic core, as well as vaguely delimited margins. The patient was sent to the Pediatric Oncology Department, where he received neoadjuvant chemotherapy according to the SIOP-NEPHROBLASTOMA protocol. There was no tumor shrinkage on the CT scan, the tumor still had a large size. Surgery was scheduled and consisted of median laparotomy, right kidney tumor excision, mesenteric lymph nodes (LNs) biopsy, incidental appendectomy, and peritoneal drainage. A central venous catheter and a urinary catheter were also placed. The postoperative course was uneventful. A routine ultrasound study revealed normal left kidney appearance and no significant abdominal postoperative findings. Pathology was consistent with cellular – type mesoblastic nephroblastoma and partial (10%) tumor necrosis. Immunohistochemistry in the tumor specimen was positive for CD-34, Vimentin, Desmin, Sma and K167 (25% of tumor cells). WT- 1 was positive in normal kidney parenchyma. LNs were tumor-free. The patient was scheduled to resume chemotherapy under the above-mentioned protocol. **BACKGROUND**: Mesoblastic nephroma (also called fetal renal hamartoma) is a common kidney tumor identified in the neonatal period and the most frequent benign kidney tumor in childhood (3-10% of all pediatric kidney tumors. It was first described by Bolande in 1967; prior to this, it was misdiagnosed as Wilms tumor. **CONCLUSION**: Large kidney tumors are generally represented by Wilms' tumor. However, the lack of tumor shrinkage after standard initial chemotherapy could suggest the presence of a different tumor histology. Surgery is mandatory for curing these patients. Pathology is able to document tumor histology and the therapeutic answer to chemotherapy.

Key Words: Laparoscopy; Renal tumor; Mesoblastic nephroma.

34. **DIAGNOSIS AND SURGERY OF SPIGELIAN HERNIA IN CHILDREN**

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INTRODUCTION: A Spigelian hernia is a congenital or usually acquired condition which occurs on the anterior abdominal wall adjacent to the semilunar line, because of a defect in the lateral edge of the rectus muscle. Most of Spigelian hernias appear in the lower abdomen where the posterior rectus fascia is absent. It is rarely seen in children and exceptionally in a post -traumatic context. Because of that rarity, this condition is often misdiagnosed or late detected, being confused with another abdominal mass. In order to reduce its subsequent complications, it is important to increase awareness upon this subject. **METHODS**: I have reviewed the case reports of fifteen traumatic Spigelian hernia in children which were described in the literature between 1956 and 2017. All the patients are boys with ages between 2.5 and 16 and with an average age of 8.7. For the majority of them the reason of occurrence of the hernia is falling onto the bicycle handlebar. Other causes are falling from a tree, being injured in a car crash or falling onto the motorcycle handlebar. **RESULTS**: In 20% of the pediatric cases strangulated hernia was ivolved, so urgent surgery was required. Analyzing the fifteen children, all went straight to the operating room, where fourteen patients were treated using open tissue repair and only one, injured in 2010, was treated by using laparoscopic tissue repair. So far, open surgery has been preferred for pediatric hernia intervention. **CONCLUSION**: Although it is an unusual condition, pediatric Spigelian hernia needs a prompt intervention in order to reduce risks. The doctor should acknowledge Spigelian hernia as a diagnosis and find the most suitable surgical technique.

Key Words: Pediatric Spigelian hernia, Laparoscopy, Open surgery.

Abstracts of the International Society for Chronic Illnesses

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01. **PREVALENCE OF TB-IRIS AMONG HIV PATIENTS: A SYSTEMATIC REVIEW AND META-ANALYSIS**

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INTRODUCTION: There is approximately 18% incidence of immune reconstitution inflammatory syndrome among patients with HIV-associated TB. Tuberculosis immune reconstitution inflammatory syndrome (TB-IRIS) is an abnormal, excessive immune response against live or dead Mycobacteria tuberculosis that may occur in HIV infected patients. Considering this, we aim to find the prevalence of TB-IRIS among HIV patients worldwide. **METHODS**: RCT, cohort, cross-sectional, and case-control studies were included. Adult patients (> 13 years) who have HIV infection with active tuberculosis and who are on TB treatment and have then commenced ART were selected. Review articles, case series, case reports, and studies that reported less than five cases of TB-IRIS were excluded. PubMed, Science Direct, and Google Scholar were last used on October 17, 2021. The Joanna Briggs Institute Critical Appraisal Tools were used to assess the risk of bias. We reported a pooled prevalence of TB-IRIS among HIV patients. We had high heterogeneity, so we used a random effect model. To assess bias in studies, we used funnel plot and Egger test. R Studio 4.1.0 was used for data analysis. **RESULTS**: Out of a total of 14,010 HIV patients worldwide from 59 studies included in our meta-analysis, the overall pooled prevalence of TB-IRIS was estimated to be 13.82% (95% CI: 10.67-17.72) with a significant heterogeneity observed (I^2=96.5%, p<0.001). When stratified by continent, the highest pooled prevalence was observed in Europe (19.39; 95% CI: 11.86- 30.07) followed by Asia (17.96; 95% CI:11.66- 26.63), North America (14.61; 95% CI: 11.28- 18.72), Africa (10.37; 95% CI: 6.72- 15.65), and South America (5.46; 95% CI:3.62-8.15). Significant heterogeneity was observed on all continents except for North America. When stratified by year of publication, the pooled prevalence was higher in studies published between 2011-2021 (15.93%; 95% CI: 11.38-21.85) compared to studies published between 2000-2010 (10.38%; 95% CI: 7.42-14.35). Significant heterogeneity was observed in both time periods. **CONCLUSION**: Overall, this meta-analysis suggests that the prevalence of the condition varies across different continents and over time, with the highest prevalence observed in Asia and Europe. However, the significant heterogeneity observed in all subgroups indicates that caution should be taken when interpreting these results.

Key Words: TB-IRIS prevalence; HIV-associated tuberculosis; Global HIV patients; Immune reconstitution syndrome; Meta-analysis HIV TB-IRIS.

02. **EFFICACY OF CANNABINOID IN DRAVET SYNDROME**

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INTRODUCTION: Dravet syndrome is a rare epileptic encephalopathy that begins in the first year of life in infants who had previously experienced typical development.1 in 17,000 is the estimated prevalence, though this number may be understated in the absence of sizable epidemiological studies. Recent studies, such as those done by Porter Brenda et al. have shown that CBD present in cannabis sativa is helpful in managing refractory cases of Dravet syndrome. Our review aims to summarize these studies that have been done in order to gain a wider perspective about the use of cannabis in Dravet syndrome. **METHODS**: The information sources used to perform literature search in this review are PubMed, Google Scholar, Doaj and Sciencedirect for all papers published till September 2022. In this study, we included randomized clinical trials, cohort studies, case-control studies, or cross-sectional studies, that were published in peer-reviewed journals within the last 10 years in English language, that adhered to the PICO of this review article. We excluded editorials, commentaries, systematic reviews, meta-analyses, and narrative reviews. The risk of bias was analyzed using the Newcastle-Ottawa scale for observational studies and the RoB 2 scale by cochrane for randomized trials. categorically with the help of X^2 test and binary data with the help of relative risk and both with confidence intervals of 95%. **RESULTS**: A total of 15 studies (9 clinical trials and 6 observational studies) published between 2013 and 2021 were selected for this review with 1959 Dravet Syndrome patients with a mean age of 11.18 years (range: 6.07 to 27.5 years), 937(47.83%) females from USA, UK, Korea, Denmark, Spain, Canada, Australia. Patients were given cannabidiol preparations for medication duration ranging from 2 to 156 weeks and doses ranging from 0.5-10 mg/kg/day for starting dose to 2.8-50 mg/kg/day as the maximum safety limit. At the end of the study period, 440 (22.5%) patients experienced a reduction in seizure frequency and 45 (2.3%) patients became seizure-free. Improvement in alertness, sleep quality, alertness, anxiety was reported by 3 studies out of which one study reported an improvement in overall quality of life however, it was not statistically significant. Several cases of adverse drug events were recorded with the highest being infections (641 cumulative episodes) like upper respiratory tract infections ,pneumonia, flu, ear infections, urinary tract infections, and pyrexia followed by GIT problems (562 cumulative episodes) like gastroenteritis, abdominal pain, constipation, appetite changes, and vomiting. Patients also experienced somnolence and fatigue (94 cumulative episodes), sleep disturbances(18 cumulative episodes), increased seizure and psychomotor activity(199 cumulative episodes), elevated liver enzymes, and ataxia. **CONCLUSION**: After a review of studies on Dravet syndrome patients, the cannabidiol preparation used as medications showed reduction in seizure frequency in some patients' with a small number of individuals experiencing seizure freedom. Despite cannabidiol's effectiveness, more than half of them had mild adverse effects. In order to fully understand the effectiveness of cannabidiol preparations, more placebo-controlled clinical trials are needed.

Abstracts

03. **THE POTENTIAL IMPACT OF THE COVID-19 PANDEMIC ON CHILD DEVELOPMENT: A SYSTEMATIC REVIEW**

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OBJECTIVE: This was a systematic review that examined the impact of COVID-19 Pandemic on child development. **INTRODUCTION**: COVID-19 led to the sudden implementation of social distancing norms worldwide, including school closures. This stress scenario could possibly alter physical activity and sleep, essential for general development which are shown to have a profound impact on brain plasticity. These stressors can eventually affect cognitive and emotional development. The Anganwadi Services Scheme and childhood vaccine delivery system was also disrupted during the course of pandemic. Prenatal stress due to a range of reasons is also suggested to affect foetal development. **RATIONALE FOR THE STUDY**: There is very limited data present of the impact of COVID-19 Pandemic on Child Development. This review of the scientific literature was undertaken in light of the above. This information will be relevant in developing strategies to help children cope with epidemic/ pandemic-driven adversity and ensure their healthy development. **METHODS**: The PubMed, Europe PMC, Google Scholar and Science Direct database was searched between July 1st 2022 and September 20th 2022. The inclusion criteria was a) articles in English, b) Articles with study population as children and the exclusion criteria was a) Articles whose full text couldn't be obtained, b) journals not accessible online. Studies were thoroughly assessed. Out of 2371 records, 7 papers were included in the review. **RESULTS**: After thorough analysis of the literature available, a total of 7 studies were included in this as shown below. Discussion: Among the 4.4 million COVID-19 deaths reported in the MPIDR COVerAGE database, 0.4 percent occurred in children and adolescents under 20 years of age, out of which 47 per cent were among children ages 0–9. The healthcare system changed its focus to the COVID-19 pandemic, which led to an increase in other childhood illnesses and outbreaks. Expectant mothers were reluctant to attend clinics and were delayed in seeking treatment. Moreover, in cases of maternal SARS-CoV-2 infection, forced separation of mothers and infants for up to 14 days has been reported. Maternal stress is thought to affect early structures of the developing limbic system. Due to the protracted lockdown's impact on the economy, food shortages and an increase in food prices resulted in children not receiving the required nutrients. Without prompt action, there were 14.3% more wasted children during the first year of the epidemic, which resulted in an additional 10,000 child fatalities each month. Before being confined to the home, toddlers between the ages of 2-3 had more opportunity to advance their motor development at a more complex level while acquiring more communication structures. A standardised MC test demonstrated the lockdown's detrimental effects on kids' MC in a way that can be scientifically measured.

Key Words: SARS-CoV-2; CoV2; COVID-19; Pandemic; Child Development; Adolescents.

04. **CAN BidSi6 AND BidEL ISOFORMS PREDICT PRECANCEROUS COLORECTAL POLYPS? - A LITERATURE REVIEW**

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INTRODUCTION: Colorectal carcinoma is the third most common malignancy worldwide. It leads to approximately 1 million deaths in a year, making it the second most common cause of death due to cancer. The diffuse and non-specific nature of the symptoms of CRC often causes delays in diagnosis. Therefore, biomarker detection can aid in identifying pre-cancerous lesions and give better insight into the prognosis of the disease. One such biomarker of interest is the Bcl-2 family proteins which are associated with apoptosis of cells. This review intends to identify the role of BidSi6 and BidEL proteins in the early detection of polyps usually in the preclinical stage, the prognosis of CRC and variations on the basis of age, gender and tumor location. **METHODS**: A comprehensive literature search was conducted using the following electronic databases: PubMed, Google Scholar, Cochrane Library, Science Direct, and Directory of Open Access Journals (DOAJ). Our search included papers published from the inception of the databases up to the current year. The search was limited to randomized control trials, observational studies - cohort, case-control, and cross-sectional studies, published in the English language in peer-reviewed journals. Editorials, conference abstracts, case reports and series, and experience pieces were excluded. Paper selection through title and abstract screening and full-text screening was performed blindly by two reviewers and in case of discrepancy, a third reviewer made the final decision. **RESULTS:** Out of 1004 studies collected from Pubmed, Science Direct, Google Scholar, and Doaj, 91 studies were included after the title and abstract review followed by a full-text review. Due to the heterogeneity of included studies in terms of design, patient characteristics, and assay met hods used, a narrative synthesis of the findings was performed. Bid, a proapoptotic member of the Bcl-2 family, acts as an agonist for Bak and Bax proteins promoting cell death. Alternative splicing of the Bid protein produces various isoforms such as BidS, BidEL, and BidES and each has separate functions. BidSi6 and BidEL are two biomarkers highly upregulated in adenomatous polyps as compared to the surrounding tissue. Descending colon has the highest expression of BidSi6 whereas the transverse colon has the highest expression of BidEL isoform. Male CRC patients have increased expression of BidEL as compared to female patients. Studies indicate that higher levels of Bid increase susceptibility to apoptosis-inducing ribonucleotide reductase-inhibiting medications thus aiding in the treatment. **CONCLUSION**: The expression of the BidSi6 and BidEL isoforms is higher in adenomatous polyps and the surrounding non-polyp tissues than in normal colon tissue, suggesting a relationship between the expression of these isoforms and polyp formation. Further clinical studies can be done to understand the efficacy and acceptance of this screening method and the use of Bidsi6 and BidEL as a novel way for the diagnosis and prognosis of Colorectal Cancer.

Abstracts

05. **ESTIMATING CHILDREN'S WEIGHT AND COMPARISON OF PEDIATRIC WEIGHT ESTIMATION METHODS IN AN INDIAN TERTIARY HOSPITAL**

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INTRODUCTION: Managing pediatric emergencies is a challenging task as parameters like drug doses and equipment sizes are based on body weight. Inaccurate estimation of weight can lead to increased adverse drug reactions or non-responsiveness. However, measuring weight in emergency situations is not always feasible, especially in low and middle-income countries where weighing scales may be unavailable. Age-based formulae are available to estimate weight rapidly, but these have been created and validated using data from high-income countries, leaving a gap in formulae for low- and middle-income countries. This study aims to create and validate similar formulae for these countries to improve the accuracy of pediatric weight estimation in emergency situations. **OBJECTIVE**: To identify the most accurate pediatric weight estimation method for the Indian population and provide recommendations for similar populations based on the findings. **METHODS**: Over two months, we conducted a cross-sectional study at a tertiary hospital in India, enrolling children aged 1-18 years with parental consent. Exclusions included children requiring immediate resuscitation, with conditions affecting their weight, or on medications affecting weight, and those with limb deformities. Participants were recruited from hospital visits, and data on age, gender, delivery mode, congenital diseases, nutritional deficiency, height, weight, and body habitus were collected using specific measuring devices. A total of 75 observations were studied for Bland-Altman analysis to calculate sample size for a multiple regression study, with target data on age, sex, height, weight, and body habitus. **RESULTS**: There is a notable disparity between the weight determined by the pawper scale and the actual weight. When the body habitus is higher on the pawper scale, there is a stronger correlation with the actual age because of the higher value. This results in an increase in the magnitude of the correlation. We found that gender has no significant effect on the relationship but age and height affected the relationship between the pawper scale and actual weight because the p-value is less than 5 and we took a level of confidence of 95%. If we took a 99% confidence interval then the level of significance is 0.001. Discussion: Our study findings indicate that the pawper scale is incapable of accurately evaluating the real weight of the individuals involved. Although previous studies have compared various methods for estimating weight, none have specifically developed a formula for the Indian pediatric population. Therefore, there is a necessity to develop such a formula in order to enhance clinical compliance. **CONCLUSION**: Accurate pediatric weight estimation is crucial for emergency situations, but not always feasible, especially in low and middle-income countries. This study aimed to identify the most accurate method for pediatric weight estimation in the Indian population. The pawper scale was found to be inadequate. Developing age-based formulae could provide recommendations for similar populations in low and middle-income countries.

Keywords: Pediatric weight estimation; Pediatric emergency weight; Weight estimation methods; Low and middle-income countries; Pawper scale accuracy.

06. EFFICACY AND SAFETY OF ADAVOSERTIB IN PLATINUM-RESISTANT OR RECURRENT OVARIAN CANCER

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INTRODUCTION: Ovarian cancer is the second leading cause of mortality in women with gynecological malignancies. The annual incidence of ovarian cancer is approximately 240,000 and the annual mortality is 152,000 [1]. Most advanced ovarian cancers tend to become resistant and the overall prognosis of this patient population remains poor. There is an urgent need for effective therapies for patients with platinum-resistant ovarian carcinomas. Evidence for appropriate and efficacious treatment for platinum-resistant and recurrent ovarian carcinoma is still lacking. Adavosertib is an inhibitor of the tyrosine kinase WEE1, hindering it from phosphorylating CDK1. Trials are underway to determine the efficacy of Adavosertib in patients with platinum-resistant ovarian cancer, and till now it is showing promising anti-tumor efficacy. It has improved progression-free and overall survival in platinum-resistant and recurrent ovarian cancer. In this article, we will discuss a systematic review and meta-analysis of the efficacy and safety profile of Adavosertib in platinum-resistant or recurrent ovarian cancers. **METHODS**: PICO for the research question was defined before beginning the review. Participants with any type of ovarian cancer diagnosed by histopathology and resistant to first-line therapy were included. Recurrent ovarian cancer after first-line treatment completion or resistant cancers were being trialed with multiple alternative drug therapies, Adavosertib being one of them. Reviewers conducted a literature search on PubMed, Google Scholar, Scopus, HINARI, and ScienceDirect databases for papers published from any date to 22 August 2022. Randomized control trials, non-randomized control trials, cohort studies, and case-control studies were included and articles not in English language were excluded. Risk of bias (quality) assessment was done using the ROBINS I tool for randomized control trials and the Newcastle Ottawa scale for cohort studies. Descriptive and summary statistics were used to describe the study cohort's socio-demographic parameters and adverse effects of Adavosertib. Meta-analysis using a random-effects model was used to assess the association of Adavosertib with the overall median survival of patients. **RESULTS**: In the meta-analysis using a random-effects model, the pooled estimate for the overall survival of patients given Adavosertib is 14.71 months (95% CI: 9.01 to 20.41 months). The estimate is statistically significant ($p < 0.0001$), indicating a positive effect of Adavosertib on overall survival. The amount of total heterogeneity (variability between studies) is estimated to be 18.97 (SE = 26.19), with a corresponding tau value (square root of tau^2) of 4.35. The I^2 statistic, which represents the proportion of total variability due to heterogeneity, is 77.36%. This indicates a high level of heterogeneity among the studies. The most common adverse effect noted was nausea (69.3%) followed by anemia (60.3%), diarrhea (56.8%), thrombocytopenia (55.0%), neutropenia (54%), vomiting (52.7%), lymphopenia (35.6%), hypomagnesemia (9.0%), and hypokalemia (5.4%). **CONCLUSION**: The meta-analysis suggests that Adavosertib significantly affects overall survival in ovarian cancer patients, with an estimated pooled median survival of 14.71 months. However, the results should be interpreted with caution due to the high heterogeneity observed among the studies. The top three most common adverse effects were nausea, anemia, and diarrhea. Only three studies were included in the meta-analysis. Reviewers recommend that large studies should be done to give us more information about this topic.

Keywords: Adavosertib efficacy; Platinum-resistant ovarian cancer; Recurrent ovarian carcinoma treatment; Tyrosine kinase WEE1; Tyrosine kinase inhibitor Adavosertib.

Abstracts

07. CLINICAL OUTCOME OF ESTABLISHED AND PROMISING TREATMENT MODALITIES OF MONKEYPOX- A SYSTEMATIC REVIEW

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INTRODUCTION: Monkeypox emerged as a public health concern in the year 2022 with sporadic cases being reported from all over the world. However, significant overlap has been demonstrated in clinical presentation with other poxviruses including atypical features and the effect of concomitant co-morbidities and therapy. The current systematic review aims to assess the association between antiviral medication and a good outcome in monkeypox patients. Secondary aims of the review are to compare Tecovirimat with other antivirals and assess the influence of demographic and clinical factors on the effect of antivirals on outcome. **METHODS**: The study protocol was registered in PROSPERO successfully and can be found on https://www.crd.york.ac.uk/prospero/display_record.php?RecordID= 357629. A comprehensive literature search was done on PubMed, Google scholar, DOAJ, and sciencedirect databases supplemented by citation searching to select case reports and case series of lab confirmed human monkeypox infection published in English full-length peer-reviewed journals elucidating the clinical outcomes of both the disease and the management strategies, regardless of demographics and comorbid status. Articles lacking focus on natural human monkeypox infection or demonstrating non-clinical interventions were excluded. Data collection and analysis was completed on Microsoft Excel using 95% confidence interval and relevant statistical tests. The critical checklist for appraisal of case reports and case series put forward by the JBI global was adopted to assess the quality of the included studies. **RESULTS**: Out of the 31 selected case reports and series, our review consists of a total of 58 patients infected with Monkeypox with a mean age of 29.54 years (range: 1.25 to 44 years), 46(79.31%) males, 5(8.62%) females, 7(12.07%) missing gender data. Antiviral treatment was estimated to be significantly associated with a good outcome in monkeypox patients (Pearson Chi2 = 6.383; p value = 0.012). Out of the 13 participants who had a bad outcome, no patient received antiviral medication while 35.56% of patients with a good outcome received at least one antiviral medication. The use of Tecovirimat as compared to other antiviral medications like acyclovir, valacyclovir, and cidofovir was significantly associated with a good outcome (Pearson Chi2 = 6.383; p value = 0.041) however it did not show a significant association when compared between a good and a very good outcome (Pearson Chi2 = 1.197; p value = 0.550). On adjusting for demographic and clinical factors, antivirals were shown to have a positive association with a good outcome; however, this relation was not significant (Maximum likelihood estimation logistic regression coefficient = 19.34; p-value = 0.995) . **CONCLUSION**: Using antiviral medications in monkeypox patients is related to a good outcome out of which Tecovirimat is shown to be more strongly associated with better outcomes. On adjusting for age, gender, immune status, HIV medications, and smallpox vaccination antivirals were associated with a good disease outcome although this association was not significant.

08. **SYSTEMATIC REVIEW ON MEDICATION EVENT REMINDER MONITORS IN TB PATIENTS**

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INTRODUCTION: With over 10 million people getting sick and 1.6 million people dying from TB each year, tuberculosis (TB) continues to be a major factor in the mortality brought on by a single infectious disease globally. The extended duration and intricacy of tuberculosis treatment led to inadequate compliance with medication, unfavourable treatment results, and drug resistance. 99-DOTS is a low-cost initiative that was brought in order to monitor patients who are coinfected with TB and HIV and their adherence to treatment. It is a mobile phone-based technology which enables remote and real-time monitoring of daily and regular medication intake. 99DOTS has been an affordable approach for enhancing TB drug adherence, which will increase compliance with anti-TB treatment. This review followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement for the reporting of systematic reviews and primary outcome measured is Medication adherence (including treatment completion rate, adherence rate) on the other hand secondary outcomes were clinical outcome (cure rate), patient and healthcare provider (HCP) satisfaction. **METHODS**: we have registered this on PROSPERO on 16 April 2023. PubMed, ScienceDirect, DOAJ, Embase, and Web of Science medical databases searched from inception till 16 Feb 2023 and study inclusion criteria- Cross-sectional, cohort, and case-control observational studies, Randomized and non-randomized clinical trials, both blinded and open-label Qualitative studies; Cochrane bias assessment tool used for randomized control trials. The Newcastle Ottawa tool used for observational studies. **RESULTS**: Study selection process - 8 studies in the end - 3 clinical trials, 4 prospective studies, 1 crosssectional; 76,811 participants; 24291 (31.62%) females; age (44.63), No formal education or low literacy- 348, Some primary or secondary education/able to read local language-3725, Unemployed/ Student/housewife/others-13748. 3 ROB2 RCTs - 5 New Castle Ottawa (3 cohort,2CS) - Studies have shown that MERM can improve patient adherence to medication. In Xiaqui 2015, the combined arm had the lowest percentage of poor adherence (13.9%), while the control arm had the highest (29.9%). Bionghi 2018 found that MERM was more sensitive in detecting missed doses than seven-day recall. Wang 2019 showed that patients had a high average percentage of doses taken (99.3%). MERM was also found to be effective in Manyazewal 2022, with comparable adherence rates to directly observed therapy (DOT). The use of MERM in patient treatment was found to be associated with better treatment outcomes in several studies. Patients who adhered to treatment had higher sputum culture conversion rates, and the MERM arm had significantly higher treatment success rates compared to the DOT arm. Additionally, increasing MERM coverage was associated with higher treatment success rates. However, loss to follow-up and treatment failure were still reported in some cases. Residence can influence the effect of MERM on adherence, with rural areas showing more reduction in poor adherence. In Peru, participants from certain districts were more likely to miss doses. TB diagnosis method and HIV status can also affect adherence rates, with bacteriologically confirmed cases showing lower treatment success rates and undetectable HIV viral load associated with higher adherence rates. Disability and old TB diagnosis were also found to negatively impact adherence rates. **CONCLUSION**: As a result, the Medication Event Reminder Monitor (MERM) has proven to be successful in boosting patient adherence and treatment success rates. The method of follow-up, however, requires refinement because a sizeable portion of participants were lost to follow-up, which led to treatment cessation. Because the text messaging group lost patients at considerably lower rates than the control group. Future research might concentrate on enhancing the follow-up procedure to make sure that patients get enough support throughout their treatment course.

09. PROTON PUMP INHIBITORS FOR GLOBUS HYSTERICUS: A SYSTEMATIC REVIEW

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INTRODUCTION: Globus hystericus is often described as the persistent or intermittent non- painful sensation of a lump or foreign body in the throat. Its presentation is fairly common in both men and women with a lifetime prevalence of 21.5 percent. The symptom is prominent in laryngopharyngeal reflux (LPR) or atypical gastroesophageal reflux disease (GERD). Due to the uncertain etiology of globus, it remains difficult to establish standard treatment strategies for affected patients. However, the role of proton pump inhibitors has shown improvement in symptoms. Various studies have shown both positive and negative correlations between globus hystericus and proton pump inhibitors. Therefore, the aim of our research is to systematically review the published literature regarding the efficacy of proton pump inhibitors in globus sensation. **METHODS**: A total of nine databases, including PubMed, Google Scholar, Springer Link, Wiley, Cochrane Library, ScienceDirect, Taylor and Francis, Ovid, and DOAJ, were thoroughly screened for the collection and retrieval of relevant articles from inception until May 2022. The screening process used keywords such as Globus Hystericus, Globus Sensation, Globus Pharyngeus, Sensation, Globus, and Proton Pump Inhibitor. The inclusion criteria consisted of accessible cohort, case-control, cross-sectional, and interventional studies available in the English language with an intervention of proton pump inhibitors. The studies had adult patients diagnosed with Globus Hystericus, monitoring the primary outcome of symptom improvement in patients with laryngopharyngeal reflux under proton pump inhibitor therapy. All reviews, meta-analysis, case reports, case series were excluded. The ROB2 tool was used for the quality assessment of clinical trials and data synthesis, while the Newcastle Ottawa tool was used for observational studies. Qualitative data synthesis was performed using meta-aggregation. **RESULTS**: A total of 2076 articles were screened and 15 papers were selected to be included in our systematic review published between 2001 to 2020. The review consisted of 1046 LPR patients with a mean age of 49.6 ± 5.49 years, 55.63% females, mean BMI of 23.69 ± 0.55 kg/m2, 22.42% smokers, 39.95% alcohol addicts, and 72.14% patients with a history of GERD. Out of the 15 studies, 13 have been described qualitatively and a quantitative analysis was done on 3 studies using R software (4.3.0). Random-effects meta-analysis of 3 studies found that the estimated odds ratio (OR) for the overall effect was 0.56 (95% CI: -0.48 to 1.60).The test for heterogeneity was significant ($Q(df = 2)$ = 13.7841, p = 0.0010). Meta aggregation of the results from the included studies showed an improvement in about 64% of patients with globus symptoms after taking PPI for 2-16 weeks either alone or in combination with antacids, H2 blockers, gabapentin, prokinetics. There was improvement in pharyngeal and laryngeal symptoms along with positive changes seen on laryngoscopy and esophagoscopy in most papers while there was no significant improvement in endoscopy findings in two papers. Lifestyle modification an abnormal baseline 24-hours pH probe data, baseline interarytenoid and vocal fold mucosal abnormality, longer duration and a higher frequency of PPI dosage was significantly associated with an improvement of overall symptoms in patients on PPI therapy. **CONCLUSION**: The relationship between resolution of globus hysterius and proton pump inhibitors is not statistically significant. Although two out of three studies showed a positive relationship, our meta-analysis did not yield any significant results. The qualitative meta- aggregation also emphasizes the influence of various demographics, patient habits, and other investigations on individual patient outcomes. More randomized controlled trials are needed to further explore the relationship between PPIs and globus hysterius.

Keywords: Globus hystericus; Proton pump inhibitors; Laryngopharyngeal reflux; Symptom improvement; Systematic review.

Abstracts of the IJMS world conference of medical student research (WCMSR) 2023

IJMS INTERNATIONAL JOURNAL of MEDICAL STUDENTS

Breaking Boundaries: The Global Impact of Medical Student Research - Highlights from the Second WCMSR IJMS Conference

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Introduction

Conferences offer attendees the opportunity to gain knowledge of the most recent advancements in scientific research, such as experimental discoveries and novel case studies. Academics and researchers disseminate their work through conferences, providing attendees with an up-close look at it. Medical students must possess such current information to remain competitive and make well-informed decisions. Conferences facilitate the expeditious distribution of the most recent findings.[1,2] A multitude of challenges are deliberated upon, and prospective resolutions are investigated throughout a conference. Gaining knowledge from the methods and approaches utilized by others to surmount comparable obstacles can furnish novices with invaluable strategies and insights.[3]

The participation of individuals from diverse backgrounds, academic disciplines, professional faculties, and geographic locations provides an opportunity for attendees to be exposed to a range of perspectives and methodologies.[4,5] This diversity promotes an intellectually stimulating atmosphere, stimulates novel approaches, and deepens comprehension of various facets of the subject matter. The establishment and growth of a professional network can result in sustained partnerships, opportunities for mentorship, and greater access to information resources; thus, networking constitutes a crucial component of conferences.[6,7]

Exposure to novel ideas, concepts, and advancements during conferences has the potential to stimulate the imagination of aspiring researchers and motivate them to implement inventive resolutions in their own research. It promotes a culture that values ongoing enhancement and instills an outlook that is focused on the future. Academic conferences serve as a cradle for novel scientific encounters.[8] By increasing one's visibility within the fraternity and providing opportunities to enhance one's resume through participation in reputable events, conference attendance can facilitate career advancement.[9]

The architects of the World Conference of Medical Student Research demonstrated a receptive attitude towards medical students and emerging researchers through their perspective. This perspective is highly compatible with the objective of creating a positive and lively environment for delegates who may be participating in their inaugural conference. Such an environment is vital for nurturing a sense of community and promoting continued engagement and participation. As evidenced by the phenomenal success of the World Conference of Medical Student Research (WCMSR) and the International Journal of Medical Students (IJMS) publications, it is critical to increase the number of venues where student-led research can be published to highlight their indispensable contribution.

The World Conference of Medical Student Research (WCMSR) is an endeavor that eliminates a barrier and provides medical students with more opportunities in research. It anticipates that the scale and frequency of these events will increase, as they are crucial in bridging the gap and expanding research opportunities for medical students. By adopting this methodology, not only do individual students gain advantages, but the field as a whole's medical knowledge and a collaborative, global research community are fostered.[10-12]

While face-to-face meetings facilitate organic participant interaction, the ecological impact linked to travel renders enormous international conferences unsustainable. Furthermore, it is possible to bridge the technological divide; as a result,

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numerous scientific conferences are executed effectively across various online platforms.[13-16]

On October 7, 2023, the IJMS organized the Second World Medical Student Research Summit (WCMSR), a virtual research conference that gave medical students and recent graduates (within three years of graduation) the chance to present their research to a global audience. The present conference marked the second occurrence of its kind after the triumphant inaugural WCMSR on November 12, 2022. By casting votes for their preferred presentation and offering their thoughts and feedback, the audience could contribute to the development of discussions and the possibility of future collaborations. A live stream of the conference was available on YouTube.

This was the second year in a row that an international medical journal hosted an academic event for either currently enrolled or recently graduated medical students. The research presented in sufficient detail demonstrated the event's global impact. Despite encountering obstacles such as presenters from different time zones participating in the event and organizers encountering multiple internet connection problems, it became necessary to have some presentations available as pre-recorded video files. The conference's primary focus was on the accessibility of medical innovation and the promotion of diverse representation in the medical fields.

Director Prakash Gupta, Deputy Director Wah Praise, Director of Abstracts Lorraine Sebopelo, Director of Logistics Shane Darbar, Director of Marketing and Communication Malina Cernatescu, and advisors Ciara Egan and Francisco J. Bonilla-Escobar comprised the organizing team for the second WCMSR. In June 2023, after the inaugural team meeting, a series of monthly meetings commenced. The team deliberated on the conference ambassadors, the jury, the ranking system, the communication campaign, and the awards during these sessions.

To distribute comprehensive information regarding the conference and provide guidelines for participation, a conference handbook was distributed among associate organizations and conference ambassadors to maximize the number of interested applicants. After the YouTube information session, the coordinating team conducted a second information session in Spanish in response to numerous inquiries from prospective attendees. The application fee was maintained at ten dollars (USD) in consideration of the requirement that young researchers have access to financing for travel and registration expenses to participate. A nominal registration fee appeared to be economically feasible for the youthful research community that attended this conference.

A total of over one hundred submissions were received, which included meta-analyses, original studies, and case reports. In accordance with a predetermined point system, the IJMS student editors selected 41 abstracts. In IJMS Volume 3, Supplemental

Issue, these abstracts have been published; a unique digital object identifier (DOI) has been assigned to each abstract. Four periods were allocated to the selected participants in accordance with their time zones and the subject matter of their papers. Each position was assigned two judges, who were provided in advance with a conference program that included the list of participants and their abstracts.

A backstage access point for participants and judges was extended to the online streaming platform known as "Streamyard" on the day of the conference. The conference commenced at 8:00 a.m. EST and concluded at 5:00 p.m. EST, interspersed with four eight-minute intermissions. The judges were furnished with individual judge papers, into which they promptly recorded their scores. After each presentation, an audience and judges-invitation question-and-answer segment lasted for a duration of three minutes. At the same time, the "Most Liked by the Public" abstract was chosen by audience votes through a QR code shown on the screen. The judges were not aware of this extra scoring method, so the votes did not affect their decision.

The top-scoring abstracts for original research and case reports during the revision process, the top-scoring original research and case report presentations based on the judge's score, and the audience-voted best presentation were the recipients of the awards.

The winners were as follows:

Special mention to the basic science study titled:
- Evaluation of the Role of Jyotishmati (Celastrus paniculatus Wild) Seed Oil in Animal Models of Alcohol Use Disorder. Alhad A Mulkalwar, MBBS. Intern, Seth Gordhandas Sunderdas Medical College and King Edward Memorial Hospital, Mumbai, India. Watch here

Most-liked Research Presentation Awarded by the public:
- Metanalysis of the diagnostic performance of western blot for the early diagnosis of congenital toxoplasmosis. Sebastián Serna Rivera, Second year Medical Student. University of Quindío, Armenia, Colombia. Watch here

Highest score during the abstract revision process for Case Reports
- 2nd place. An Atypical Sellar Mass: Sellar Tuberculoma in a Young Patient -Case Report. Arwa Moiz Jamali, Final M.B.B.S Part -2, GMERS Medical College (Maharaja Sayajirao University), Vadodara, India. Watch here
- 1st place. Fulminant Hepatic Failure as the Initial Presentation of Hodgkin's Disease and Liver Transplantation: A Case Report. Mauricio Alejandro Saldana-Ruiz, Social Service. Instituto Mexicano del Seguro Social, Monterrey, México. Watch here

Highest score during the abstract revision process for Original Research

- TIE: 3rd place. Prevalence of Depression among Infertile Couples Attending a Tertiary-Care Infertility Clinic. Gayathri S Hari, Intern, Government Medical College, Thiruvananthapuram, Kerala, India. Watch here
- TIE: 3rd place. The Stroke Riskometer App as an Educational Campaign in Outpatient Clinics and its Association with Knowledge of Stroke Warning Signs. Diego Alejandro Ortega-Moreno, Sixth-year Medical Student. Universidad Autónoma de Nuevo León, Monterrey, México. Watch here
- 2nd place. Knowledge, Attitude, And Factors Affecting Human Papilloma Virus Vaccine Uptake Among Female Undergraduate Students In Public Tertiary Institutions In Lagos State Nigeria. Elile Monisola Okoka, BSc, MSc, MBBS. Lagos State University College of Medicine, Ikeja, Nigeria. Watch here
- 1st place. Implementation of an Outbound Ambulatory Scheduling Team Reduces Disparities in Access to Pediatric Otolaryngology Care. Caleb Allred, BA, third-year medical student. Division of Pediatric Otolaryngology, Seattle Children's Hospital, Seattle, WA, USA. University of Washington School of Medicine, Seattle, WA, USA. Watch here

Award for best Case Report presentation at the WCMSR based on judge scores

- 2nd place. Combined Complex Gastroschisis, Bladder exstrophy and Pelvic organs Evisceration: A Rare Entity. Manuel Alejandro Vásquez Salguero, Fifth-year Medical Student. Universidad del Valle, Cali, Colombia. Watch here
- 1st place. A Rare Case of Candida parapsilosis Empyema Thoracis. Arielle E. Solomon, First-year Medical Student. Louisiana State University Health Sciences Center, New Orleans, USA. Watch here

Award for best Research Presentation at the WCMSR Original Research based on judge score.

- 3rd place. Are Female Undergraduates at the University of Calabar Equipped with the Knowledge, Positive Attitudes, and Effective Practices of Contraceptives?. Etuk Emediong Saturday, MBBCH, University of Calabar, Calabar, Nigeria. Watch here
- TIE: 2nd place. Implementation of an Outbound Ambulatory Scheduling Team Reduces Disparities in Access to Pediatric Otolaryngology Care. Caleb Allred, BA, third-year medical student. Division of Pediatric Otolaryngology, Seattle

Children's Hospital, Seattle, WA, USA. University of Washington School of Medicine, Seattle, WA, USA. Watch here

- TIE: 2nd place. Frontlines and Crossroads: The Impact of COVID-19 on the Motivations of Medical Students from Selected Philippine Medical Schools in Pursuing Their Medical Studies. Adriel Agunod Cheng, Medical Intern (Fifth Year). Ateneo School of Medicine and Public Health, Pasig City, Metro Manila, Philippines. Watch here
- TIE: 2nd place. Clinical audit of electronic health records to identify prediabetic patients and compliance with ICGP Guidelines in their management. R. Castledine, Final-year medical student, University College Dublin, Dublin 4, Ireland. Watch here
- 1st place. The Role of Language Concordant Care on Increasing Parental Engagement in Shared Decision Making. Caleb Allred, BA, third-year medical student. Division of Pediatric Otolaryngology, Seattle Children's Hospital, Seattle, WA, USA. University of Washington School of Medicine, Seattle, WA, USA. Watch here

The IJMS journal oversees organizing the second international research conference for professionals and novices in the field of healthcare, called IJMS WCMSR 2023. Approximately one hundred contributions were received from more than thirty countries worldwide. Throughout the duration of this research conference, the number of actual attendees exceeded 1,000. The fact that the number of viewers has surpassed 2,000 weeks later indicates that this event has remained a topic of interest for some time.

The course of this occasion has been an extraordinary expedition, replete with enlightenment, cooperation, and a mutual dedication to propelling medical student research to triumphant status. The intellectually stimulating dialogues, innovative investigations, and establishment of relationships observed throughout the occasion would without a doubt leave an indelible imprint on the interchange of information and concepts. The initial efforts invested will rapidly give rise to forthcoming progress and cooperative ventures. As the proceedings of the Second IJMS World Conference of Medical Student Research end, the organizing committee anticipates witnessing the outcomes of the collaborative efforts that have commenced. Furthermore, it hopes to reunite at subsequent conferences to further this endeavor of investigation and revelation. Moreover, it wishes to perpetuate the innovative ethos that has distinguished our period of collaboration.

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Abstracts of the IJMS World Conference of Medical Student Research (WCMSR) 2023

Oral Presentations
ORIGINAL RESEARCH

AWARD FOR HIGHEST SCORE DURING THE ABSTRACT REVISION PROCESS FOR ORIGINAL RESEARCH, 1ST PLACE:

AWARD FOR BEST RESEARCH PRESENTATION AT THE WCMSR ORIGINAL RESEARCH BASED ON JUDGE SCORE, 2nd PLACE:

01.   **IMPLEMENTATION OF AN OUTBOUND AMBULATORY SCHEDULING TEAM REDUCES DISPARITIES IN ACCESS TO PEDIATRIC OTOLARYNGOLOGY CARE**

Not published due to authors' request

Abstracts

AWARD FOR HIGHEST SCORE DURING THE ABSTRACT REVISION PROCESS FOR ORIGINAL RESEARCH, 2nd PLACE:

02. **KNOWLEDGE, ATTITUDE, AND FACTORS AFFECTING HUMAN PAPILLOMA VIRUS VACCINE UPTAKE AMONG FEMALE UNDERGRADUATE STUDENTS IN PUBLIC TERTIARY INSTITUTIONS IN LAGOS STATE NIGERIA**

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https://www.youtube.com/watch?v=vlsNiqV1-28&t=15987s

BACKGROUND: Human Papillomavirus is responsible for about 99% of all cervical cancers. Cervical cancer remains a leading cause of morbidity and mortality in women from Low and middle-income countries. Vaccination against human papillomavirus (HPV) is an effective way to prevent the disease, however, uptake remains low in Nigeria. This study aimed to assess the knowledge, attitudes, and factors affecting Human papillomavirus vaccine uptake among female undergraduate students in public tertiary institutions in Lagos State, Nigeria. **METHODS**: This was a descriptive cross-sectional study. A multistage sampling method was used to select 355 female undergraduate students from Lagos State University and the University of Lagos. Data was gathered using a self-administered structured questionnaire. Data analysis was done using Epi info version 7 statistical software and Chi square was used to test for statistical significance. **RESULTS**: There were 355 respondents giving a response rate of 100%. The responders' average age was 23 years old. 63.4% and 61.3% had heard about cervical cancer and cervical cancer screening respectively. Only 27.6% had heard of Human Papilloma virus vaccine. While most of the respondents (53.8%) had poor overall knowledge of cervical cancer, majority had a positive attitude towards cervical cancer prevention and screening (80.8%). Only 1.1% of the respondents had received the HPV vaccine, and a lack of awareness about the vaccine was the most commonly reported barrier to uptake (64.7%). Also, only 3.7% had ever done a cervical cancer screening and the most commonly reported reason was "Fear of bad result"(31%). There was no association between overall knowledge of cervical cancer and uptake of cervical cancer screening (p=0.08). **CONCLUSION**: In conclusion, despite the positive attitude towards cervical cancer prevention and screening, HPV vaccine uptake remains low among young women in this population, and knowledge about the vaccine is lacking. Increasing awareness of the link between HPV and cervical cancer and promoting the vaccine as a safe and effective method of prevention, may help to increase uptake.

Table. Association Between Overall Knowledge of Cervical Cancer and Uptake of Cervical Cancer Screening.

| Overall knowledge of cervical cancer | Uptake Of Cervical Cancer Screening | | | X^2 | df | P-value |
	Yes n(%)	No n(%)	Total n(%)			
Good	9(5.5)	155(94.5)	164(100.0)	2.880	1	0.08
Poor	4(2.1)	187(97.9)	191(100.0)			
Total	13(3.7)	342(96.3)	355(100.0)			

Legend: The result is not significant at p<0.05
Key words: Cervical cancer; HPV; HPV Vaccines (Source: MeSH-NLM).

AWARD FOR HIGHEST SCORE DURING THE ABSTRACT REVISION PROCESS FOR CASE REPORTS, 1ST PLACE:

03. **FULMINANT HEPATIC FAILURE AS THE INITIAL PRESENTATION OF HODGKIN'S DISEASE AND LIVER TRANSPLANTATION: A CASE REPORT**

Mauricio Alejandro Saldaña-Ruiz[1], Federico Ortiz-Alonso[2], Adriana Carolina Sandoval-González[2], Liliana Sayuri Tapia-Brito[2], Laura Carolina Lozano-Galván[3], Karla Monserrat Ramírez-Pintor[4].

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https://www.youtube.com/watch?v=vlsNiqV1-28&t=31008s

BACKGROUND: Hodgkin's lymphoma (HL) or Hodgkin's disease is a B-cell neoplasm, characterized by affecting the lymph nodes or extranodal lymphoid tissue. Includes two distinct entities: classical HL (95%) and lymphocyte-predominant nodular HL. This disease presents as cervical and intrathoracic lymph node growth in 60-90%, however, presentation due to liver infiltration is extremely rare. Around 30% of patients manifest the disease with a picture of general malaise based on fever, night sweats, weight loss and chronic pruritus.

THE CASE: We present the case of a 13-year-old female, who started with an insidious condition that evolved to fulminant hepatic failure of unknown etiology (Table 1), it was decided to perform an orthothopic liver transplant, the histopathological analysis of the explant and a lymph node reported mixed cellularity Hodgkin's disease. Subsequently, the hematology service requested a lumbar puncture, with no evidence of infiltration. It was decided to initiate six cycles of chemotherapy with BEACOPP scheme, evolving without complications and achieving a complete response eleven months later; currently, she has been free of disease for three years.

CONCLUSION: The cause remains unknown for this disease, so an early diagnosis and having different treatment options are the key points to combat this disease. Even though having a diagnosed neoplasm is a contraindication for receiving a liver transplant at present, the diagnosis was not available at that time, and because of her clinical situation, she met the criteria for liver transplantation. In the future, it could be essential to individualize each case to weigh the risks and benefits of carrying out the transplant or not.

Table. Blood Test Results to Evaluation for Transplantation Department.

Total bilirubin	17
Direct bilirubin	11.9
Indirect bilirubin	5.6
ALT	1014
AST	716
LDH	418
INR	8.3
Ammonium	285
Procalcitonin	>10

Key words: Hodgkin disease; Liver failure; Transplantation (Source: MeSH-NLM).

Abstracts

AWARD FOR SHARED HIGHEST SCORE DURING THE ABSTRACT REVISION PROCESS FOR ORIGINAL RESEARCH, 3RD PLACE:

04. **PREVALENCE OF DEPRESSION AMONG INFERTILE COUPLES ATTENDING A TERTIARY-CARE INFERTILITY CLINIC**

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https://www.youtube.com/watch?v=vlsNiqV1-28&t=9470s

BACKGROUND: A large number of people are affected by infertility in their life time indicating that this is a major health challenge globally. Infertility is currently being thought-about as a medical and social condition which can cause social, emotional and psychological distress. It is estimated that psychological factors have an important role in the pathogenesis of infertility. Although depression has been described as a common consequence of infertility, very little has been documented related to its prevalence and severity, especially in India. This might be because those who fall outside the normal range of depression inventories are poorly reported or because of the fact that the psychological impact of infertility differs from that due to other medical conditions. Addressing the psychological issues during infertility treatment is now considered important. This is because of the increasing awareness that depression could be the cause of infertility, its consequence, or both and may interfere success of infertility treatment and the ability to tolerate on-going treatment. Treatments for infertility have effects on estrogen and progesterone levels. These hormones influence mood of the woman through their actions on serotonin. On the other hand emotional distress itself can suppress ovarian function or implantation resulting in decreased fertility and reduced response to its treatment. This interaction creates a vicious circle between depression and infertile status and can result in treatment dropouts or treatment failure. This study aimed to assess the prevalence of depression among infertile couples attending a tertiary care infertility clinic. **METHODS**: A Hospital based cross sectional study was conducted and a calculated sample of 126 couples with infertility attending the infertility clinic were consecutively enrolled into the study after obtaining consent. Data was collected using an interviewer-administered semi-structured questionnaire and depression was assessed using PHQ9 depression tool. A couple was considered to have depression if at least one of the partners had depression. Data was analysed using SPSS version 16. Quantitative variables were expressed as mean and standard deviation and qualitative variables as proportions. Chi-square test of independence and Fisher's Exact Test were used to test the association between categorical variables. **RESULTS**: The prevalence of depression among infertile couples was 51.6 %(n=65). Depression was more prevalent in females (48.4% n=61) than in males (33.3% n=42) and when the reason for infertility was female-related. There was a significant risk of development of depression when the other partner had depression (p=0.001, Odds ratio=25.196). **CONCLUSION**: Females are often blamed for childlessness especially in rural India resulting in an increased prevalence of depression among infertile females. Efforts should be taken to educate people about infertility so that there is less pressure on infertile couples. Counseling methods, especially supportive psychotherapy and interventions to decrease and prevent the development of severe depression among these patients should be considered.

Figure. Prevalence of Depression among Infertile Couples.
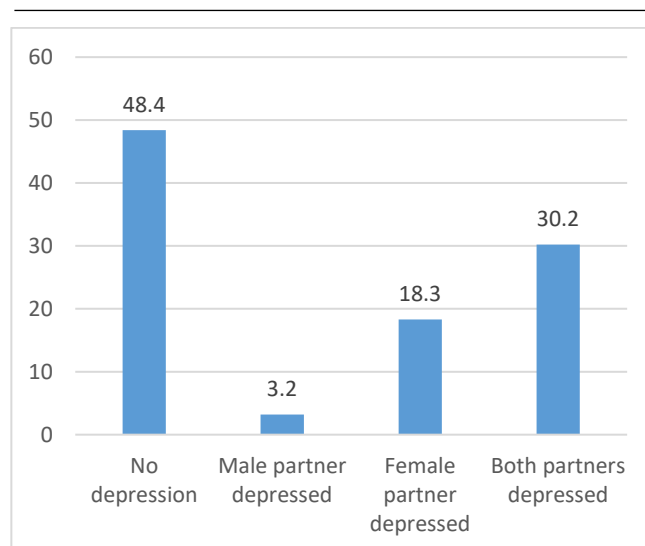
Key words: Infertility; Depression; Infertile Couples (Source: MeSH-NLM).

AWARD FOR SHARED HIGHEST SCORE DURING THE ABSTRACT REVISION PROCESS FOR ORIGINAL RESEARCH, 3RD PLACE:

05. **THE STROKE RISKOMETER APP AS AN EDUCATIONAL CAMPAIGN IN OUTPATIENT CLINICS AND ITS ASSOCIATION WITH KNOWLEDGE OF STROKE WARNING SIGNS**

Diego Alejandro Ortega-Moreno[1], Fernando Tienda-López[2], David Loaiza-Pérez[2], Fernando Chávez-Ríos[1], Samantha Salinas-Rodríguez[3], Egla Samantha Sánchez-Peralta[1], Ana Laura de León-Pérez[1], Diego Oyervides-Recio[2], Arely Rodríguez-Salazar[3], Emmanuel Navarrete Juárez[4], Fernando Góngora-Rivera[5].

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▶ https://www.youtube.com/watch?v=vlsNiqV1-28&t=23318s

BACKGROUND: Stroke is highly prevalent worldwide; however, the associated symptoms and risk factors are commonly unknown among the general population. No study has been carried out in the Mexican population about the risk of stroke and knowledge of warning signs. **AIM**: Describe the knowledge of early signs of stroke and their association with the risk of cerebral infarction at 5 and 10 years using the American Stroke Association validated application "Stroke Riskometer." **METHODS**: Observational, descriptive, cross-sectional study including adult outpatients from the Neurology department at "Dr. José Eleuterio González" University Hospital. Anthropometric measurements and vital signs were taken, and the "Stroke Riskometer" was used to calculate the stroke risk at 5 and 10 years. Early signs of stroke were assessed, with emphasis on the acronym "CAMALEON", a mnemonic that includes the three main early signs of Stroke in Spanish. Descriptive statistics were performed. For inferential statistics, Chi-Square test for categorical variables, Mann-Whitney U and Kruskal-Wallis for numerical variables, Spearman correlation for numerical and ordinal variables were conducted, considering significance at $p<0.05$, using SPSSv25 for statistical analysis. **RESULTS**: Total of 200 individuals were included; 142 (71%) were women; with an average age of 54.72 (±14.63) years. The most prevalent stroke risk factors were sedentary lifestyle (54%), high blood pressure (41%), and diabetes mellitus (32%). 72.5% were unaware of any early signs of stroke, 10.5% knew 1 sign, 6% knew 2 signs, and 11% knew 3 signs. "Facial Weakness" was the most recognized sign (19.5%), followed by "Arm Weakness" (16%) and "Speech Disturbance" (15.5%). A weak correlation was found between knowledge of early signs and 5 or 10-year risk ($r=0.14$, $p=0.048$; $r=0.138$, $p=0.051$, respectively). There is a significant difference between knowledge of early signs and educational level ($p=0.004$), with higher knowledge in higher education. A difference was observed between male and female genders and 5 and 10-year risk (Median 5.3 vs 3.6, $p=0.007$ and Median 11 vs 5.4, $p=<0.001$, respectively). Additionally, a significant difference was found between current occupation and 5 and 10-year stroke risk ($p=<0.001$). Post-hoc analysis and percentage risk analysis found significant differences between students and other occupations. There is an increase in stroke risk as an individual's life decade advances. **CONCLUSION**: Awareness of stroke warning signs is low, remaining an unfinished goal despite educational campaigns in Mexico. A national, massive, and ongoing campaign for the population is necessary.

Table. Population characteristics.

Characteristics	N= 200
Female gender (%)	142 (71)
Age (SD)	54.73 (±14.63)
Height in cm (SD)	160.9 (±8.5)
Weight in kg (SD)	77 (±16.46)
BMI (SD)	29.66 (±6.06)
WHR (SD)	0.95 (±0.12)
Stroke Risk Factors	
Alcohol intake (%)	48 (24)
Smoking (%)	30 (15)
High Blood Pressure (%)	82 (41)
Sedentary lifestyle (%)	108 (54)
Diabetes Mellitus (%)	64 (32)
Traumatic brain injury (%)	62 (31)
Antecedent of parents with Stroke or Acute Miocardial Infarction (%)	50 (25)
Stroke history (%)	16 (8)
CAMALEON knowledge	
Facial weakness (%)	39 (19.5)
Arm weakness (%)	32 (16)
Speech disturbance (%)	31 (15.5)
Knowledge of another sign (%)	9 (4.5)

Abstracts

06. **KNOWLEDGE, ATTITUDE AND USE OF CONTRACEPTIVES AMONG WOMEN OF REPRODUCTIVE AGE IN A NIGERIAN RURAL COMMUNITY**

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▶ https://www.youtube.com/watch?v=vlsNiqV1-28&t=6807s

BACKGROUND: The use of contraception, encompassing various methods such as hormonal pills, condoms, intrauterine devices, and natural techniques like abstinence, plays a pivotal role in family planning and reproductive health. Despite its importance, the utilization of contraceptives, particularly in low-resource nations like Nigeria, has remained notably low. This is concerning, considering the positive impact of contraception on maternal and child health and its contribution to national development by curbing population growth. In Nigeria, awareness of contraception is relatively high, but the adoption of modern contraceptive methods is alarmingly low, with only 10% of females utilizing them. This rate is notably insufficient given the high levels of sexual activity, especially among adolescents and young adults. Furthermore, regional disparities exist within Nigeria, with the south-south geopolitical zone exhibiting a higher prevalence of modern contraceptive use at 15.5%. Factors influencing contraceptive usage include education, religious beliefs, and awareness of available methods. In Yenagoa, Bayelsa state, the prevalence of modern contraceptives was notably higher at 36.8% in 2017, underscoring the impact of education and knowledge of contraceptive options. Increasing contraceptive use is crucial for Nigeria, a lower-middle-income country, as it not only aids in averting unplanned pregnancies and maternal mortality but also in controlling population growth. **AIM**: The study aimed to shed light on contraceptives' profound health advantages to both women and families. By investigating the knowledge, attitude, and use of contraceptives within the context of the study community, it sought to contribute to the promotion and enhancement of contraceptive use among women of reproductive age in the rural community of Sagbama, South-south Nigeria. **METHODS**: A descriptive cross-sectional study was conducted among women of reproductive age, over a period of 3 months in Sagbama Community, Bayelsa state. Multi-stage sampling was employed. Data was obtained using interviewer-administered semi-structured 31-item questionnaire and analyzed using IBM SPSS version 26. Bivariate analysis with p-value <0.05 was significant. **RESULTS**: Among the 314 respondents, the mean age was 29.96 years. Nearly half were married (48.4%), with varying numbers of children. The majority had some form of education, with 46.8% having secondary education. Most respondents (95.9%) had heard of contraceptives, primarily from friends (76.4%) and hospitals (58%). The most well-known contraceptive methods were male condoms (95.9%), contraceptive pills (79.9%), and implants (72.3%). Positive attitudes toward contraceptive use were observed in 83.4% of respondents, driven by the desire to prevent unwanted pregnancies and space births (80.9%). Of sexually active women (81.4%), 53.3% used contraceptives, with male condoms (44%) and pills (15.7%) being the most common methods. Reasons for non-use included a perceived lack of need (28.6%) and fear of side effects (26.5%). A significant association was noted between factors like age, educational level, and the use of contraceptives (p <0.05). Respondents aged 20-34 years used some form of contraceptives when compared to other age groups. Also, respondents who have had secondary and tertiary levels of education reported a higher level of using contraceptives. **CONCLUSION**: Despite high knowledge levels, the use of contraceptives among women of reproductive age in the community was poor. Education and addressing misconceptions are essential to promote effective contraceptive use. Comprehensive health and sex education involving both men and women should be provided to dispel misconceptions and encourage correct contraceptive use.

Table. Showing Summary of Key Findings.

Aspect	Percentage (%)
Knowledge of Contraceptives	95.9%
Positive Attitude	83.4%
Current Sexual Activity	84.1%
Contraceptive Use	53.3%
Most Commonly Used Method	Male Condoms (44%)
Top Reasons for Non-use of Contraceptives	• No Perceived Need (28.6%) • Fear of side effects 26.5%)

Key words: Contraception; Women; Family planning; Reproductive health; Nigeria (Source: MeSH-NLM).

07. **THE STIGMA TOWARDS SEEKING HELP AMONG UNIVERSITIES STUDENTS: A CROSS-SECTIONAL STUDY IN JORDAN**

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https://www.youtube.com/watch?v=vlsNiqV1-28&t=2468s

BACKGROUND: The study aims to assess university students' attitudes and stigmas regarding seeking mental health help, focusing on the barriers they face. Existing literature highlights the prevalence of social stigma, embarrassment, and fear among medical students, which hinder their willingness to seek psychiatric treatment despite the burden of mental illness. **METHODS**: The study is a cross-sectional examination of university students in Jordan. A self-administered English questionnaire with three domains and 31 questions was used. The first domain collected sociodemographic data. The second domain measured attitudes using the Attitudes Toward Seeking Professional Psychological Help Scale (ATSPPH), a higher score indicating a better help-seeking attitude. The third domain gauged stigma using the Stigma Scale for Receiving Psychological Help (SSRPH), a higher score indicating a higher degree of perceived stigma. A pilot test involving over 20 participants was conducted. Data analysis will be done via SPSS version 26. Normality was tested using the Shapiro–Wilk test. Chi-square, Mann-Whitney U and Kruskal-Wallis tests were used to assess associations between categorical and continuous variables. A significance level of $p < 0.05$ will be used. Finally, ethical considerations were obtained. **RESULTS**: In a study involving 1,151 participants. The average age of the participants was 22.35, with most identifying as female (70.7%) and single (95.1%). A majority had a monthly income exceeding 500 JDs, and around 60% lived in urban areas. Notably, 66.1% were medical students, and 88.3% were enrolled in public universities. Parental education was relatively high, with over 68% of mothers and 70% of fathers holding bachelor's degrees or higher. The study also delved into participants' mental health backgrounds, revealing that a significant portion had experienced the absence (27.6%) or death (22.7%) of first-degree relatives. A substantial number (71.5%) believed that mental illness carried a sense of embarrassment within their society, while 24.2% reported having family members who had experienced mental illness. The average score of ATSPPHS indicated that 84.7% had a negative attitude toward seeking professional help for emotional problems. Significant differences in attitudes were found across demographics, with females (p-value<0.001), urban residents (p-value=0.001), and those without first-degree relatives experiencing absence or death more likely to have a higher mean (p-value=0.001, 0.002, respectively). SSRPH also yielded important insights. The mean score was 11.39, with male participants, those with absent first-degree relatives, those who believed mental illness was embarrassing, and those with family members with mental illnesses tending to have higher scores, indicating higher stigma. Lastly, Spearman's correlation analysis revealed a weak negative association between ATSPPHS and SSRPH scales, suggesting that those with more positive attitudes toward seeking professional help tended to have lower stigma. **CONCLUSION**: In summary, the study shed light on the attitudes and stigma related to seeking professional psychological help among university students in Jordan. It found that negative attitudes were prevalent, particularly among certain demographic groups, and that attitudes were associated with the perception of stigma. These findings could inform interventions and educational programs to reduce stigma and promote a more positive attitude toward seeking mental health support.

Key words: ATSPPHS; SSRPH; Medical Students (Source: MeSH-NLM).

Abstracts

08. **EFFICACY OF TRIPLE PROPHYLAXIS FOR PREVENTION OF GRAFT-VERSUS-HOST DISEASE IN MATCHED SIBLING ALLOGENEIC PERIPHERAL BLOOD HEMATOPOIETIC STEM CELL TRANSPLANTATION IN PEDIATRIC PATIENTS**

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https://www.youtube.com/watch?v=vlsNiqV1-28&t=25638s

BACKGROUND: Graft-versus-host disease (GVHD) continues to compromise the overall success of allogenic hematopoietic stem cell transplantation. It is the most important cause of morbidity and non-relapse mortality after allogeneic hematopoietic stem cell transplantation for malignant disease. In adults, post-transplant cyclophosphamide (Cy-PT) has been shown to be a feasible, economically accessible, and effective strategy to reduce the incidence of GVHD in matched sibling hematopoietic stem cell transplantation in combination with a calcineurin inhibitor plus mycophenolate mofetil (MMF). **AIM:** Demonstrate the clinical benefit of Cy-PT plus a calcineurin inhibitor combined with MMF for GVHD prophylaxis in HLA-matched, related peripheral blood stem cell transplants in pediatric patients with malignant hematologic neoplasms compared to standard therapy in historical controls. **METHODS**: A retrospective study was conducted on 22 pediatric patients with malignant hematologic neoplasms who underwent HLA-matched related peripheral blood allogenic stem cell transplantation (alloSCT) between July 2012 and December 2022. A comparison was made between two groups, one with triple prophylaxis using Cy-PT, cyclosporine (CsA), and MMF, and a historical cohort that received standard GVHD prophylaxis based on CsA and methotrexate (MTX). Patients were identified from a hospital registry. Descriptive and inferential statistics will be reported, using SPSS version 25 for analysis. **RESULTS**: Twenty-two patients received HLA-matched alloSCT from first-degree relatives genotypically identical in HLA-A, HLA-B, and HLA-DRB1 alleles. The demographic characteristics of both groups are summarized in the table. No patient experienced primary graft failure, sinusoidal obstructive syndrome, or hemorrhagic cystitis. Acute GVHD grade II-IV did not develop in patients who received Cy-PT, whereas in the CsA/MTX prophylaxis group, 1 (9%) grade IV patient was observed who died due to this cause before day 100. Two patients (18%) developed Moderate/Severe GVHD in the CsA/MTX group, and 1 (9%) had moderate GVHD in the Cy-PT group. Two-year overall survival was similar between the two groups (Cy-PT 53% and CsA/MTX 67%), as was event-free survival (PTCy 48% vs. CsA/MTX 61%). **CONCLUSION**: Peripheral blood represents a feasible option in our setting due to rapid graft engraftment, short hospital stays, and low incidence of primary graft failure, but with a higher incidence of GVHD as reported in the literature. We explored the efficacy and safety of triple prophylaxis for HLA-matched alloSCTs from peripheral blood using Cy-PT + CsA + MMF in a small group of patients, with outcomes slightly better than standard prophylaxis. These preliminary results motivate us to continue with this new regimen.

Table. Population characteristics.

Variable	CsA (n=11)	CsA (n=11)	p
Median recipient age at alloSCT (min-max)	12 (2-18)	11 (7-21)	0.12
Median follow-up (min-max)	15 (2-85)	13 (3-48)	0.8
Diagnosis			0.2
Acute lymphoblastic leukemia (%)	7 (64)	4 (36)	
Acute myeloid leukemia (%)	4 (36)	6 (55)	
Chronic myeloid leukemia (%)	0 (0)	1 (9)	
Relapse (%)	6 (55)	6 (55)	
Estimated 24-month overall survival	67%	54%	0.88
Estimated 24-moth event-free survival	61%	48%	0.92
GVHD			0.413
Acute grade II-IV (%)	1 (9)	0 (0)	
Acute grade III-IV (%)	1 (9)	0 (0)	
Severe chronic (%)	2 (18)	1 (9)	

AWARD FOR HIGHEST SCORE DURING THE ABSTRACT REVISION PROCESS FOR CASE REPORTS, 2nd PLACE:

09. **AN ATYPICAL SELLAR MASS: SELLAR TUBERCULOMA IN A YOUNG PATIENT -CASE REPORT**

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▶ https://www.youtube.com/watch?v=vlsNiqV1-28&t=3292s

BACKGROUND: Central nervous system involvement, though uncommon, is one of the most severe form of tuberculosis. Its manifestations include tuberculoma and tuberculous meningitis, with the majority of cases affecting children and immunocompromised patients. Overall, tuberculomas account for 0.15–2 % of all intracranial lesions but sellar tuberculoma is extremely rare. **THE CASE**:18 yr. old female patient presented with complain of generalized weakness ,eye pain, headache since 3-4 months .Brain Magnetic resonance imaging (MRI)showed sellar and suprasellar space occupying lesion. Trans sphenoidal approach was used to remove the lesion completely .The pathological evaluation confirmed a tuberculoma and the patient was put on postoperative anti-tubercular therapy. **CONCLUSION**: Although rare, intracranial tuberculomas, particularly those that originate in the sellar, are notorious for mimicking pituitary tumours by jeopardizing pituitary hormonal function and applying compressive forces on surrounding intracranial structures. However, a prompt assessment can help overcome this diagnostic difficulty with the timely initiation of anti-tubercular therapy (ATT).

Table. MRI Brain Coronal Study Showing Sellar Mass with Suprasellar Extension Causing Optic Chiasm Compression.
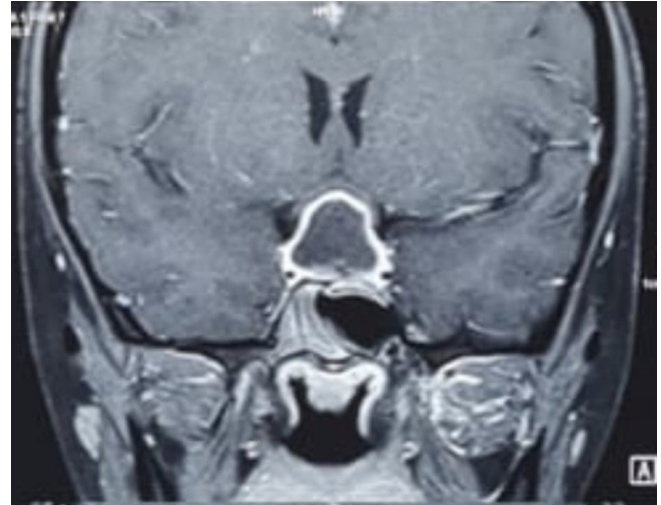
Key words: Intracranial Tuberculoma, Pituitary Disease, Antitubercular Agents, Case Reports (Source: MeSH-NLM).

Abstracts

10. **INTRAOPERATIVE COMPLICATIONS IN CEREBRAL ENDOVASCULAR ANEURYSMAL SURGERY: A RETROSPECTIVE SINGLE-CENTER STUDY (2019-2023)**

Andrej Terzić[1], Reza Mashaghi Tabari[1], Ivan Vukašinović[2], Žarko Nedeljković[2], Aleksa Mićić[3], Mihajlo Ćurčić[1], Lukas Rasulić[3].

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▶ https://www.youtube.com/watch?v=vlsNiqV1-28&t=10767s

BACKGROUND: Endovascular cerebral aneurysm surgery, also known as endovascular neurosurgery, represents a minimally invasive approach aimed at diagnosing and treating intracerebral aneurysms through the use of catheters, wires, and various specialized instruments. This innovative approach has emerged as a promising alternative to traditional open surgical methods for addressing cerebral aneurysms. However, it is essential to acknowledge that while endovascular procedures offer numerous advantages, such as reduced morbidity and mortality rates, they are not devoid of associated risks, some of which can have life-threatening consequences. This paper seeks to delve into the realm of intraoperative complications in patients undergoing endovascular treatment for aneurysms, shedding light on the challenges and complexities within this field. **METHODS**: For this retrospective investigation, we conducted a comprehensive analysis of medical records spanning a five-year period, from 2019 to 2023. These records were obtained from the Neurosurgical Clinic of Belgrade, located within the University Clinical Center of Serbia. The study cohort comprised 44 patients who encountered intraoperative complications during endovascular aneurysm treatment. Patient information, including age, gender, aneurysm size, location, specific segment, and details regarding the nature of the intraoperative complications, was meticulously collected. Subsequently, the gathered data underwent rigorous statistical analysis. **RESULTS**: Out of a total of 429 patients who underwent endovascular treatment for aneurysms, 44 experienced intraoperative complications. The average age of these individuals was 55.4 years, ranging from 13 to 83 years, with the majority being women (37 out of 44, or 84.1%). Thirteen patients (29.5%) presented with significant preoperative co-morbidities and had previously experienced subarachnoid hemorrhaging before undergoing treatment. The most prevalent location for aneurysms was the internal carotid artery (ICA), accounting for 40.9% of cases, with the C6 segment being the most frequently affected at 27.3%. Other notable locations included the anterior communicating artery (ACoA) at 34.1% and the middle cerebral artery (MCA) at 13.6%. Regarding intraoperative complications, technical issues were the most frequent, affecting 84.1% of patients, while biological mishaps impacted 7 out of 44 patients (15.9%). Coil failure occurred in 16 out of 44 patients (36.4%), and stent failure was observed in 14 out of 44 patients (31.8%). Catheter-related problems were noted in 5 patients (11.4%), as were thromboembolic events, also in 5 patients (11.4%). Contrast extravasation was observed in 3 patients (6.8%), and hematoma formation occurred in 1 patient (2.3%). Additionally, 12 out of 44 aneurysms were found to be ruptured (27.3%). In this retrospective study spanning five years, our investigation focused on intraoperative complications in 44 out of 429 patients who underwent endovascular aneurysmal surgery. Our findings underscored that the primary source of these complications was related to technical issues, aligning with observations from previously referenced studies. Notably, coil and stent failures emerged as prominent concerns, along with catheter-related problems and thromboembolic events. **CONCLUSION**: In conclusion, the endovascular approach to treating aneurysms, while offering a minimally invasive option, is not exempt from inherent risks and complications. Despite these challenges, endovascular neurosurgery continues to hold significant value as a crucial alternative for the treatment of intracerebral aneurysms.

Table. Types of Intraoperative Complications

Complications				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Catheter Failure	5	11.4	11.4	11.4
Coil Failure	16	36.4	36.4	47.7
Extravasation	3	6.8	6.8	54.5
Stent Failure	14	31.8	31.8	86.4
Thrombosis	5	11.4	11.4	97.7
Hematoma	1	2.3	2.3	100.0
Total	44	100.0	100.0	

11. **DERMATOLOGICAL EXAMINATION TRAINING: SHAPING CAREERS THROUGH HANDS-ON PRACTICE**

Didina-Catalina Barbalata[1], Cristian Toma[2].

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▶ https://www.youtube.com/watch?v=vlsNiqV1-28&t=3922s

BACKGROUND: Choosing a career path represents a decision of immense significance in the lives of aspiring medical professionals and is influenced by several pivotal factors such as: clinical exposure, hands-on experience and interaction with specialists in the field. Dermatology represents one speciality in which hands-on experience is crucial and medical simulation training can ensure an innovative and transformative tool to develop the skills needed for dermatological evaluation. **AIM:** Our research explores the impact of participating in hands-on dermatological evaluation training on the decision to pursue a career path within this field. By analyzing the participants' views regarding the training, their skill self-assessment and the objective evaluation of theoretical knowledge, we aim to analyze how this type of workshop shapes professional goals. **METHODS**: We conducted a single-center analysis on the training experience of 50 medical students, divided in groups of ten. The training, conducted by a dermatologist, consisted of 1-hour theoretical presentation and 3-hour bedside practice, the students examining each other alternately. A ten questions knowledge assessment questionnaire was used to evaluate the participants before and after the workshop. Additionally, the students were surveyed regarding their views on the impact of this training on their decision to pursue a career in dermatology and the self-assessment pre- and post-training on a five-point Likert scale. **RESULTS**: We observed a 48% increase in the knowledge assessment scores (before: 5.26±1.33 out of 10, after: 7.8±0.88 out of 10). A similar increase was observed in the participants' self-assessment scores, as they doubled (before: 1.76+/-0.62 out of 5, after: 3.84+/-0.88 out of 5). Although 60% of the participants were not interested in pursuing a career in dermatology before the training, the hands-on experience determined 64% to take this speciality into consideration as a potential career path. Unanimously, the participants agreed that this training represents a valuable addition to the classical clinical curriculum as it allows hands-on practice which could improve their confidence in the future patient interactions. **CONCLUSION**: In summary, our research highlights the importance of integrating hands-on training into medical education to better prepare students for their roles in healthcare and adapt to evolving medical practices.

Figure. The Evolution of Interest in Pursuing Dermatology Before and After the Training.
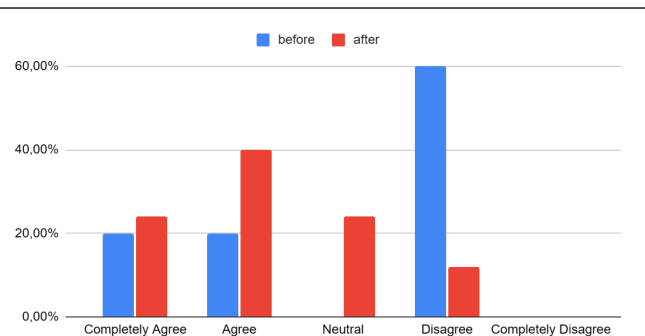
Key words: Medical Simulation; Dermatology; Diagnoses and Examinations. (Source: MeSH-NLM).

Abstracts

12. **MEDICAL STUDENT SYNDROME IN MEDICAL UNIVERSITY STUDENTS IN JORDAN: A CROSS-SECTIONAL STUDY**

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▶ https://www.youtube.com/watch?v=vlsNiqV1-28&t=26458s

BACKGROUND: The widely recognized phenomenon known as 'medical student syndrome' refers to the tendency of many medical students to develop fears and symptoms of illnesses they are studying. Extensive research has underscored the substantial psychological pressure that medical students endure due to factors like a demanding workload, exam-related stress, anxiety arising from new clinical experiences, and the competitive academic environment. Given its classification as a mental health issue, 'medical student syndrome' has been investigated in multiple countries. Consequently, our study aims to delve deeper into this phenomenon among medical students, considering various demographic factors. **METHODS**: A cross-sectional study was conducted. The survey includes sociodemographic questions and attitudes toward the syndrome, adapted from a Polish study. Data was using SPSS, with statistical tests conducted at a 95% confidence level. **RESULTS**: A total of 1,050 participants completed the questionnaire for this study, with 67.3% being females. The average age was 20.91 years, and the majority were unmarried (98.2%). Most participants reported a monthly income of less than 500 JDs, and only 16.2% identified as smokers. Clinical students accounted for 33.6% of the sample, while 11.2% indicated a history of mental illnesses. Additionally, 36.3% had taken previous courses related to mental illnesses, and 13.7% had sought psychiatric consultation. Furthermore, 15.6% had utilized psychiatric or psychotherapeutic counseling for other reasons, and 26.6% expressed a desire to visit a psychiatrist or psychologist due to their fear of falling ill. Mann–Whitney U and Kruskal–Wallis tests were conducted to explore potential differences in total scores based on demographic and mental background factors. Preclinical students had significantly higher mean scores compared to clinical students (41.68 vs. 39.35, p = 0.001). Respondents who had used psychiatric or psychotherapeutic counseling for reasons other than those inquired had significantly higher scores than those who did not (43.85 vs. 40.35, p < 0.001). Similarly, respondents planning to visit a psychiatrist/psychologist due to their fear of falling ill scored significantly higher than those who did not share this intention (43.85 vs. 39.96, p < 0.001). Multiple linear regression analysis revealed that the "year of study" variable was the only significant predictor of the total score, with a coefficient of -3.196, a t-statistic of -4.057, and a p-value < 0.001. This negative coefficient suggested that as the year of study increased, the total score tended to decrease significantly. However, the model had relatively weak explanatory power, with R^2 indicating that it explained only about 3.5% of the variance in the dependent variable, and R^2adj accounting for approximately 2.7% after adjusting for model complexity. **CONCLUSION**: In summary, the study included a diverse group of participants with varying demographic and mental background factors. Preclinical students tended to have higher scores, and those with a history of seeking mental health services or expressing an intention to do so had higher scores. The year of study was a significant predictor of the total score, suggesting that as students progressed in their studies, their scores tended to decrease. However, the model's overall explanatory power was relatively limited.

Key words: Medical Student; Jordan; Cross-Sectional Studies (Source: MeSH-NLM).

AWARD FOR BEST CASE REPORT PRESENTATION AT THE WCMSR BASED ON JUDGE SCORES, 2nd PLACE:

13. **COMBINED COMPLEX GASTROSCHISIS, BLADDER EXSTROPHY AND PELVIC ORGANS EVISCERATION: A RARE ENTITY**

Manuel Alejandro Vásquez Salguero[1], Wilmar Saldarriaga Gil[2].
[1] Fifth-year Medical Student. Universidad del Valle, Cali, Colombia.
[2] MD, MSC, PhD. Universidad del Valle, Cali, Colombia.

▶ https://www.youtube.com/watch?v=vlsNiqV1-28&t=21848s

BACKGROUND: Abdominal wall defects are one the most common congenital anomalies, with a prevalence of 1 in every 2,000 live births, common entities are gastroschisis, omphalocele, and midline defects such as bladder exstrophy-epispadias complex. Affected individuals are characterized by bowel evisceration, bladder exstrophy, orthopedic, gastrointestinal or gynecological/urological anomalies. These conditions have been widely studied in the literature, however, there are only three cases reports of gastroschisis and bladder exstrophy affecting the same patient. We report the case of a female patient product of a non-consanguineous marriage, born at 36 weeks of gestation. Her mother, a 20-year-old, Gravida 1 patient, presented to the outpatient OB/GYN service of the Hospital Universitario del Valle, in Cali, Colombia, with the report of an ultrasound performed at the 17th week of gestation: abdominal wall defect suggesting gastroschisis. At the time of this visit the patient was 21 weeks pregnant, history and physical exam were unremarkable. A detailed anatomy ultrasound was set to be performed at week 22 of pregnancy and a follow-up visit was scheduled within a month. The patient returned for follow-up at 31 weeks of pregnancy, the detailed anatomy ultrasound carried was carried out at week 23, it showed a fetus with intrauterine growth restriction and gastroschisis without bowel dilation. The day after, the patient was cited in order to perform an in-house detailed anatomy ultrasound with doppler, this study confirmed the intrauterine growth restriction (below the 3rd percentile, normal doppler) and gastroschisis, in-house ultrasound follow-up was advised to the patient. A latter ultrasound performed during the 34th week showed: complex gastroschisis with an anechoic image near the umbilical cord base, that could correspond to bladder exstrophy or an allantoic cyst. A physician meeting was carried out between the OBGYNs and pediatric surgeons, were they decided to cite the patient for a C-section at 36 weeks of pregnancy, and, immediately after the procedure, prepare the newborn for surgery. After the C-section, initial inspection of the newborn revealed gastroschisis with herniation of the small and large bowel, stomach, bladder and female reproductive organs, APGAR scores were 8 at one minute and 9 at 5 minutes, the patient then underwent closure surgery without complications, later on, after 25 days in the neonatal intensive care unit, she made a full recovery and was discharged from the hospital. The underlying etiology of these congenital anomalies is still unknow, however, multiple pathogenesis mechanisms such as embryological, genetic, and environmental factors have been proposed. The aim of this case report is to provide to the scientific literature the fourth case of gastroschisis, bladder exstrophy and reproductive organs evisceration affecting the same patient (third case in the Americas and first in Colombia), contributing to literature review update since the last case in 2004, highlighting the value of early prenatal diagnosis with adequate ultrasound follow-up and multidisciplinary team involvement, in order to make joint decisions with patients regarding delivery method, pregnancy follow-up or voluntary interruption of pregnancy, allowing adequate physician-patient communication and also genetic/reproductive counseling for future pregnancies.

Figure. Newborn with evident evisceration of the stomach, bladder, uterus (including fallopian tubes and ovaries), small and large bowel.

Key words: Congenital Abnormalities; Gastroschisis; Bladder Exstrophy. (Source: MeSH-NLM).

Abstracts

AWARD FOR BEST RESEARCH PRESENTATION AT THE WCMSR ORIGINAL RESEARCH BASED ON JUDGE SCORE, 3rd PLACE:

14. **ARE FEMALE UNDERGRADUATES AT THE UNIVERSITY OF CALABAR EQUIPPED WITH THE KNOWLEDGE, POSITIVE ATTITUDES, AND EFFECTIVE PRACTICES OF CONTRACEPTIVES?**

Emediong Saturday Etuk[1], Faithful Miebaka Daniel[1], Monica Anurika Gbuchie[2], Akwa Archibong Eyo[1], Victoria Ezinne Emeruwa[3].

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[2] MBBS, Niger Delta University, Wilberforce Island, Nigeria.
[3] MD, V. N Karazin National University, Kharkov, Ukraine.

https://www.youtube.com/watch?v=vlsNiqV1-28&t=20366s

BACKGROUND: The global challenge of rapid population growth necessitates family planning programs to address reproductive health needs and control population increase. However, unintended pregnancies, particularly among adolescents, remain a significant problem, leading to increased risks of sexually transmitted infections and unsafe abortions. In Nigeria, contraceptive use is low among youths, resulting in high incidences of induced abortions and sexually transmitted infections. Barriers such as religious beliefs, cultural factors, limited availability, personal beliefs, and fear of side effects contribute to the under-utilization of contraceptives. **AIM:** This research aims to assess the knowledge, attitudes, and practices of contraceptive use among female university students and highlight the importance of promoting effective contraceptive use to improve maternal health and reduce the burden of unsafe abortions. **METHODS**: A descriptive cross-sectional study was conducted among female undergraduates of the University of Calabar, Cross River State. Data was collected using a 42-item questionnaire after obtaining informed consent. Multi-stage sampling was employed, and data was analyzed with IBM SPSS version 26 using descriptive and inferential statistics. **RESULTS**: The mean age of respondents was 21.5 ± 2.72 years. Most participants were in their first (26.7%) or second (22.6%) level of study. 28.8% were in sexual relationships, while 71.2% were not. Approximately a quarter of respondents had experienced symptoms of sexually transmitted infections. 71.5% had no knowledge of emergency contraception. Condoms (71.2%) and pills (54.5%) were the most commonly mentioned methods of contraception, while tubal ligation was the least popular (4.7%). The main benefit cited for contraception was the prevention of unwanted pregnancy (92.2%). 47.3% had no idea about the side effects of contraception, with irregular menstruation being the most commonly mentioned side effect (19.3%). Friends/peers, the internet, and school were the primary sources of information on contraception. 56.4% believed that contraception is not solely for females and should not be reserved for the literate. Over a third of respondents thought contraception encourages promiscuity and has too many side effects, with more than half demanding contraceptive services on campus. Less than half of the respondents (43.9%) reported using contraception at some point, with even smaller percentages using contraception in the last six months (25.2%) or during their last sexual intercourse (23.8%). Of the 101 who used contraceptives in their last sexual intercourse, the majority (83%) used condoms, while pills (7%) and emergency contraception (10%) were less common. Preferred sources for contraception were pharmacies (57.5%) and chemist shops/patent medicine vendors (24.7%). Religion (41.5%), fear of side effects (34.9%), and partner consent (28.3%) were the main influences on contraceptive use. Several factors were significantly associated with contraception utilization, including age, partner's educational level, knowledge of contraception, and level of study (p<0.05). **CONCLUSION**: The low utilization of contraception among female undergraduates at the University of Calabar despite high awareness and poor knowledge highlights the need for interventions. Factors influencing utilization include age, knowledge, and level of study. Barriers such as religion, fear of side effects, and partner consent must be addressed. Recommendations include sensitization campaigns, establishing a youth-friendly center on campus, incorporating contraception into curricula, collaborating with NGOs, and increasing funding for research.

Table. Socio-demographic Characteristics of Students by Contraceptive Utilization.

CHARACTERISTICS	CONTRACEPTIVE USE			
	Yes (186) Freq (%)	No (238) Freq (%)	Chi-square test	P-Value
Age(years)				
≤21	83(35.9)	143(64.1)	χ^2= 12.98	**p= 0.001**
>21	103(53.4)	90(46.6)		
Marital status				
Married	5(50)	5(50)	χ^2= 0.16	p= 0.70
Not married	181(43.7)	90(46.6)		
Religious affiliation				
Catholic	43(44.3)	54(55.7)	χ^2= 0.01	p= 0.92
Non-catholic	143(43.7)	184(56.3)		
Partner's Occupation				
Student/Unemployed	59(55.7)	47(44.3)	χ^2= 0.25	p= 0.62
Employed	49(52.1)	45(47.9)		
Knowledge of contraception				
Good knowledge	76(54.3)	64(45.7)	χ^2= 9.21	**p= 0.002**
Poor knowledge	110(38.7)	174(61.3)		
No of Children				
None	180(43.8)	231(56.2)	χ^2= 0.03	p= 0.87
≥1	6(46.2)	7(53.8)		
Level of study				
Junior (100-200L)	78(37.3)	131(62.7)	χ^2= 7.16	**p= 0.007**
Senior (300-500L)	108(50.2)	107(49.8)		

Key words: Contraception; Pregnancy; Family Planning Services; Adolescent; Nigeria (Source: MeSH-NLM).

15. **CLINICAL PRESENTATION OF ACUTE KIDNEY INJURY IN PEDIATRIC; DR SALMA DIALYSIS CENTRE 2022**

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[1] Sixth-year Medical Student. University of Khartoum. Khartoum, Sudan.

BACKGROUND: Unlike in developed countries, where AKI typically develops in older patients with systemic diseases, multiple co-morbidities, and multiorgan failure, AKI in developing countries primarily affects young individuals, particularly children and adolescents, and is often caused by a single factor. Although early detection and management can reduce complications, there is limited data available from Africa on this disease. **AIM:** This study aims to describe the sociodemographic characteristics and clinical profile of pediatric patients with AKI presenting to Salma Dialysis Center from 2017 to 2021. **METHODS**: A hospital-based descriptive cross-sectional study was conducted at Salma Dialysis Center in Khartoum, Sudan. Patients' hospital records from January 2017 to December 2021 were reviewed to gather information on clinical presentation, investigations, treatment, and patient outcomes. **RESULTS**: Out of the 76 patients included in the study, 60.5% were males, with a median age of 8.0 years (range 0.09-17). Approximately 39.5% of the patients were from Khartoum state. The most common presenting symptoms were fever, generalized swelling, and changes in urine colour. The mean blood urea and creatinine levels were 1.6 mg/dl (range 0.2-23.8) and 82.0 mg/dl (range 9-416), respectively. The most common causes of AKI were malaria, sepsis, and sickle cell nephropathy. The majority of patients did not require dialysis and recovered without complications (84.2%). **CONCLUSION**: Malaria was found to be the most common cause of AKI in pediatric patients, with a higher prevalence among male patients. The prognosis for these patients was generally favourable.

Table. Shows the Demographic Characteristics of AKI Pediatric Patients who Attended to Salma Dialysis and Transplant Center 2017-2021.

Characteristics	Frequencies	Percentages
Age	Median 8.0 range(0.09-17) years	
Sex		
Male	46	60.5
Female	30	39.5
Socio-economic status		
High	2	2.6
Moderate	5	6.6
low	69	90.8
Consanguinity between the parents		
Yes	58	76.3
No	18	23.7
State of Residency		
Blue Nile	3	3.9
East Darfur	1	1.3
Jazeera	14	18.4
Kassala	1	1.3
Khartoum	30	39.5
North Darfur	2	2.6
North Kordofan	6	7.9
South Darfur	7	9.2
The river Nile	1	1.3
West Darfur	3	3.9
West Kordofan	2	2.6
White Nile	6	7.9

Key words: Acute Kidney Injury; Malaria; Paediatrics; Renal Dialysis (Source: MeSH-NLM).

Abstracts

16. **FREQUENCY OF CYSTS BY IMMUNOFLUORESCENCE ASSAY IN HUMAN BRAIN TISSUE OF SUICIDE, TRAFFIC ACCIDENT AND HOMICIDE DECEDENTS**

Karol J. Isaza[1], Santiago Guerrero V[1], Laura M. García G[1], Jennifer Nessim[2], Miguel Baquero[3], Jorge E. Gómez M[4].

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[2] Psychologist. PhD student, University of Quindío, Armenia, Colombia.
[3] MD, Pathologist, of the National Institute of Legal Medicine and Forensic Sciences, Armenia, Colombia.
[4] MD. PhD Professor, University of Quindio, Armenia, Colombia.

▶ https://www.youtube.com/watch?v=vlsNiqV1-28&t=27552s

Figure. Presence of cysts.

Key words: Fluorescent Antibody Technique; BAG1 Antigen; Human Brain; Violent Death (Source: MeSH-NLM).

BACKGROUND: Several studies link toxoplasmosis with neuropsychiatric disorders. There are no previous reports of the frequency of the presence of parasite tissue cysts in autopsy cases from violent death or how is the distribution of frequency according to brain regions related with behavior (amygdala or hippocampus). The immune fluorescent antibody technique (IFAT) detects specific target antigens that allow the observation of bradyzoites within tissue cysts. We describe the frequency of tissue cysts using the IFAT detection in human brain tissue samples from immunocompetent persons deceased by suicide, traffic accidents and homicide. **METHODS**: 21 brains from the National Institute of Legal Medicine and Forensic Sciences chapter "Eje Cafetero" (including cities of Armenia, Pereira, and Manizales) of violently deceased (which includes suicide, traffic accidents and homicide) persons were obtained, subsequently sections of the amygdala and hippocampus areas were processed in paraffin and thick sections were cut from paraffin blocks and mounted on slides by means of the IFAT, by using specific monoclonal anti BAG1 protein of the bradyzoite. Serum samples from the decedents were also examined for the presence of IgG and IgM antibodies to establish the existence of a previous infection. Data such as age, gender, sociodemographic data, and type of death were also obtained. Evaluation of the differences in the percentage of positivity according to the cause of death were assayed by using the Fisher exact test. **RESULTS**: Two decedents (9.5%) were female and 19 (90.4%) were male. The age ranged from 14 to 65 years; most completed or were in high school level of education. By city, 9 were from Armenia (42.8%) and 12 from Manizales (57.1%). By type of death, 11 samples (52.3%) were victims of homicide, 9 samples (42.8%) were suicide, and one sample (4.7%) was a traffic accident. We identified tissue cysts containing the bradyzoites in two cases in amygdala (9.5%), in amygdala and hippocampus in tree (14.2%), and one case only in hippocampus (4.7%). In total we have six of 23 (26%) were positive for cysts in the brain. No statistically significant differences were found between groups in the percent of positivity. After counting we found a mean 1,3 ± 0,4 cysts by 20 microscopy fields of positive brain tissue examined. We found one of 21 positives for IgG antibodies in blood (47%). Within six cases with positive by IFAT in brain tissue five were also positive in antibodies (83%) only one case was negative for antibodies. **CONCLUSION**: The presence of bradyzoite was demonstrated in brain tissue samples from immunocompetent patients who suffered a violent death in the cities of Armenia and Manizales, Colombia. The results suggest that the bradyzoite after infection is permanently localized in brain tissue. A higher prevalence of bradyzoite parasites is observed in amygdala samples, an important region for behavior control.
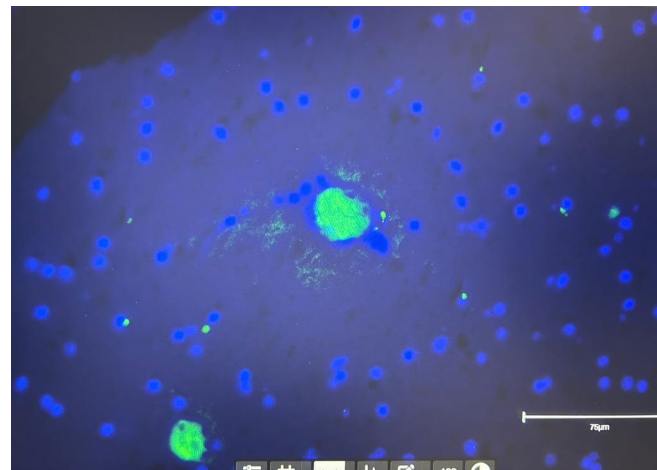
AWARD FOR BEST RESEARCH PRESENTATION AT THE WCMSR ORIGINAL RESEARCH BASED ON JUDGE SCORE, 2nd PLACE:

17. **CLINICAL AUDIT OF ELECTRONIC HEALTH RECORDS TO IDENTIFY PREDIABETIC PATIENTS AND COMPLIANCE WITH ICGP GUIDELINES IN THEIR MANAGEMENT**

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[2] Coombe Family Practice, Dublin 8, Ireland.

https://www.youtube.com/watch?v=vlsNiqV1-28&t=19055s

BACKGROUND: Current Irish College of General Practitioners (ICGP) Guidelines recommend that all patients with prediabetes have repeat HbA1c testing within 12 months, in addition to BMI and blood pressure measurement. It is also recommended that patients are provided with lifestyle advice. We carried out a clinical audit of electronic health records at a Dublin GP practice to evaluate adherence with guidelines. **METHODS**: We searched electronic health records to identify all patients with HbA1c values between 42-48 mmol/mol dating back to 1 January 2016, excluding patients with a subsequent diagnosis of diabetes. We manually reviewed the records of 129 included patients to extract the relevant data. **RESULTS**: 40.3% of patients had correct diagnosis coding. 74.4% of patients had their blood pressure checked within 2 months of a HbA1c result, whereas only 48.1% had their weight recorded. Of 81 patients with an initial HbA1c over 12 months previously, 66.6% had repeat testing within this period, and 33.3% of patients were either tested later or had no follow-up testing. A reference to lifestyle advice was made in the records of 52.7% of patients. **CONCLUSION**: Management for a significant proportion of patients did not meet standards as per ICGP Guidelines. To improve this, we coded all patients with pre-diabetes and placed a reminder of their electronic chart to recheck Hba1c, BMI and BP within 12 months. We conducted an educational meeting with practice clinicians regarding ICGP guidelines. The plan is to re-audit at 6 and 12 months to evaluate the benefit of intervention.

Key words: Clinical Audit; Prediabetes; Hba1c Protein, Human; Clinical Coding; Body Weights and Measures (Source: MeSH-NLM).

Abstracts

18. **MEDICAL STUDENTS WITH DYSLEXIA: WHAT ARE THEIR EXPERIENCES IN MEDICAL SCHOOL**

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▶ https://www.youtube.com/watch?v=vlsNiqV1-28&t=13239s

BACKGROUND: Dyslexia in medical school is a common condition. With the COVID-19 pandemic, the medical school curriculum has changed. This might lead to differing experiences faced by medical students compared to previous literature. **AIM:** This paper explores the experiences of medical students with dyslexia post-COVID-19 with a focus on study methods and support. **METHODS**: A qualitative study involving online interviews of five medical students with a formal dyslexia diagnosis was done. Data was collected over two months from February 2023 to March 2023. Transcripts were analysed using an iterative constant comparative approach, forming themes on the experiences of these medical students. **RESULTS**: Participants experienced a general need to work harder than their peers in certain areas of medical school, especially those pertaining to traditional learning methods. However, some participants also acknowledged strengths in other areas compared to their peers, especially concerning more visual areas of medicine. This is translated into study strategies whereby participants opt for different learning methods, adopting more visual, kinaesthetic and auditory approaches. Participants felt that more support should be given in terms of making teaching resources more dyslexic-friendly. While participants were more open in the disclosure of dyslexia, the aspect of raising awareness of the positive aspects of dyslexia in medical school was also raised. **CONCLUSION**: While there are more positive findings compared to previous literature, more effort needs to be made to support dyslexic students in medical school. Education of different members in medical school on the condition could also be actioned to reduce labels and stereotypes of it.

Table. Population characteristics.

Themes	Subthemes
Feelings Of Being At A Disadvantage	Need To Work Harder
	Study Strategies
	Strengths and Optimism
Outlook Towards Dyslexia	Initial Negative Emotions
	Sense Of Achievement
	Labels And Disclosure
Move To A More Conducive Environment	Delayed Diagnosis And Support
	Improved Work Environment
	Support

Key words: Dyslexia; Medical Student; Medical School; Medical Curriculum (Source: MeSH-NLM).

19. **REPORT OF INCIDENTAL VULVAR MALIGNANT MELANOMA UPON DERMATOLOGIC EVALUATION FOR VAGINAL CYST**

Vrusha K. Shah[1], Alaina J. James[2], Sarah E. Taylor[2], Diwakar Davar[3], Noel Provost[4].

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▶ https://www.youtube.com/watch?v=vlsNiqV1-28&t=29676s

Figure. Incidental Vulvar Malignant Melanoma on Right Labia Minora Revealed During Dermatologic Evaluation.

Key words: Melanoma; Vulvar Neoplasms; Cysts (Source: MeSH-NLM).

BACKGROUND: Vulvar malignant melanoma is a rare, often aggressive and recurring disease with a poorly understood prognosis. Here, we describe a patient with a longstanding vaginal cyst who was diagnosed with vulvar malignant melanoma upon a dermatologic evaluation. **THE CASE**: Our patient, a 53-year-old female, with a family history of a father with malignant melanoma presented for evaluation of a vaginal cyst present for over 20 years on her right labia that had become painful and began draining over the past year. She was seen twice at urgent care and was treated with oral antibiotics (unspecified) and referred to dermatology. A comprehensive dermatologic evaluation of the epidermal inclusion cyst in the right labia majora incidentally revealed a neoplasm of uncertain behavior in the right labia minora suspicious for vulvar malignant melanoma (Figure 1). Shave biopsy of her right labia minora revealed a Stage 1B malignant melanoma, superficial spreading type, with a 1.1 mm depth of invasion (Breslow thickness) and 11 per 1mm^2 mitotic count. Right partial radical vulvectomy and bilateral inguinal sentinel lymph node biopsies were performed. Pathology showed malignant melanoma with negative margins and negative nodes. Treatment and excision for her vaginal cyst was not initiated as her symptoms were not bothersome at the time of visit. She presented with a post-operative infection after 2 weeks which was suggestive of bilateral inguinal vulval acute cellulitis with no definitive abscess upon computed tomography (CT) scan. She was initially treated with vancomycin with additional piperacillin/tazobactam for a total of three days. Trimethoprim/sulfamethoxazole was later initiated for 14 days. Medical oncology referral for evaluation of metastasis revealed normal positron emission tomography-computed tomography scan. Notably, the patient had extensive confluent/atypical lentiginous basal melanocytic hyperplasia at the periphery which could not be distinguished from melanoma in situ. Upon tumor board consultation, scouting biopsies of her left labia majora were performed. Pathology showed melanocytic hyperplasia instead of residual malignant melanoma at the periphery. The patient now follows up every few months with dermatology and medical oncology. **CONCLUSION**: Given the often fast, aggressive spread of vulvar malignant melanoma, timely dermatologic evaluations are necessary. Among those at higher risk due to a personal or family history of malignant melanoma, regular total body skin cancer screenings are indicated. Further, the sensitive and typically sun-protected location of a vulvar malignant melanoma might preclude a dermatologic evaluation in this area and highlights the need for more comprehensive vaginal screenings and better communication between dermatologic and gynecologic medical care teams.

Abstracts

20. **MULTILAYER PERCEPTRON ARTIFICIAL NEURAL NETWORKS AND TREE MODELS AS MULTIFACTORIAL BINARY PREDICTORS OF HEART DISEASE AND FAILURE**

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▶ https://www.youtube.com/watch?v=vIsNiqV1-28&t=5668s

BACKGROUND: Cardiovascular diseases (CVDs) are a significant global health concern, causing an estimated 17.9 million deaths annually, which represents 31% of worldwide deaths. A significant proportion of CVD deaths are due to heart attacks and strokes, with one-third of these deaths occurring prematurely in individuals under 70 years old. Heart failure is a notable event within CVDs and emerges when the heart cannot efficiently pump blood to fulfill the body's requirements. This complex syndrome's origins are multifactorial and often arise from conditions such as hypertension, diabetes, and hyperlipidemia. Large datasets with multiple features offer an opportunity for machine learning to aid in the early detection and prediction of heart failure. **METHODS**: The study employed an unmatched case-control retrospective design. Supervised machine learning models were utilized, notably Multilayer Perceptron Artificial Neural Networks (MLP-ANNs) and decision tree-based models, to predict heart failure disease using data from 918 patients. The open licensed dataset, a combination from five independent heart datasets, comprises 11 demographic and clinical features related to patient status. The MLP-ANN, equipped with a hidden layer and a hyperbolic tangent activation function, was trained on 70% of the data and tested on the remaining 30%. Additionally, the study evaluated the decision tree model's performance through split-sample validation and 10-fold cross-validation. **RESULTS**: The ANN model demonstrated an accuracy of 88.10% in predicting heart disease (AUROC = 0.942) based on six factors and five covariates. The cross-validated tree model achieved an overall predictive accuracy of 84.3%. In contrast, the split-sample validated tree model, which used a balanced 50-50 data split for training and testing, attained an accuracy of 82.0%. OldPeak (ST depression induced by exercise relative to rest) had the highest normalized importance calculated from the MLP ANN model. **CONCLUSION**: Machine learning predictions have gained importance in healthcare, presenting potential benefits in early detection and intervention, leading to improved patient outcomes and reduced healthcare expenses. The study revealed that ANNs outperform decision tree models in accuracy for the dataset in use. Furthermore, the research emphasized the significance of the clinical feature "Oldpeak" in predicting heart failure through ANNs. ANNs can discern intricate relationships between variables and recognize non-linear interactions, a capability sometimes missed by decision tree models. However, the efficacy of machine learning models remains dependent on the quality and volume of the available data.

Table. Model Outcomes.

Model/Parameter	Description/Outcome
Dataset Size	*918 patients*
Training Set	*616 patients*
Test Set	*302 patients*
ANN Model	
Sum of Squares Error (Training)	*57.171*
Sum of Squares Error (Test)	*27.944*
Correct Predictions (Healthy)	*82.70%*
Correct Predictions (Diseased)	*92.60%*
Overall Accuracy	*88.10%*
AUROC	***0.942***
Cross-Validated Tree Model	
Overall Accuracy	*84.30%*
Independent Variables Included	*ST_Slope, ChestPainType, RestingECG, Oldpeak, MaxHR*
Split-Sample Tree Model	
Overall Accuracy	*82.00%*
Independent Variables Included	*ST_Slope, ChestPainType, ExerciseAngina*

Key words: Cardiovascular Diseases; Heart Diseases; Heart Failure; Artificial Intelligence; Machine Learning; Neural Networks; Computer; Decision Trees; Risk Factors (Source: MeSH-NLM).

21. **OVERLAP SYNDROME BETWEEN SJÖGREN'S SYNDROME AND SYSTEMIC SCLEROSIS**

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▶ https://www.youtube.com/watch?v=vlsNiqV1-28&t=18530s

BACKGROUND: Overlap syndrome is a condition in which a patient experiences symptoms that correspond to two or more of these classification standards. More commonly, the overlap is limited to one or more manifestations of each disease. Sjögren's syndrome is a systemic autoimmune disease characterized by the presence of a dry syndrome, primarily xerostomia and xerophthalmia, originating from dysfunction of exocrine glands. Conversely, systemic sclerosis is a rare autoimmune disease characterized by fibrosis development in the skin, internal organs, and vasculopathies. **THE CASE**: Our case report presents a 62-year-old woman with a history of Sjögren's syndrome, who exhibited symptoms of xerostomia, xerophthalmia, xerodermia, and had anti-Ro antibodies exceeding 200, along with ultrasound findings of chronic sialadenitis. The patient was under treatment with hydroxychloroquine, pilocarpine, and deflazacort. She attended the rheumatology outpatient clinic for routine follow-up of her disease. During the evaluation, bilateral sclerodactyly and "salt and pepper" lesions on the limbs were observed, along with two reports of ANA with titers of 1:2650 and a centromere pattern. Due to suspicion of coexistence of limited systemic sclerosis, anticentromere antibodies were requested, yielding a positive result, while anti-Scl 70 antibodies were negative. This confirmed the diagnostic suspicion, and azathioprine 50 mg every 12 hours and colchicine 0.5 mg daily were added to her therapy. **CONCLUSION**: Although Sjögren's syndrome and systemic sclerosis can manifest independently, in certain instances, both conditions overlap. It is worth noting that among the various overlap syndromes related to connective tissue diseases, this overlap is infrequent. However, within connective tissue diseases, systemic sclerosis tends to exhibit overlap more frequently, reported in up to 20-30% of cases. In cases of connective tissue diseases, consideration should always be given to overlap syndromes, involving a meticulous physical examination and careful assessment of laboratory results to avoid overlooking conditions that may negatively impact patients' future quality of life.

Key words: Sjögren's Syndrome; Systemic Sclerosis; Overlap Syndrome; Autoimmunity (Source: MeSH-NLM).

Abstracts

AWARD FOR BEST RESEARCH PRESENTATION AT THE WCMSR ORIGINAL RESEARCH BASED ON JUDGE SCORE, 1st PLACE:

22. **THE ROLE OF LANGUAGE CONCORDANT CARE ON INCREASING PARENTAL ENGAGEMENT IN SHARED DECISION MAKING**

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https://www.youtube.com/watch?v=vlsNiqV1-28&t=24160s

BACKGROUND: Shared decision making (SDM) allows patients and physicians to make decisions together by incorporating clinical expertise and patient preference. While SDM can improve patient satisfaction, preferences on the extent of involvement in SDM vary, particularly among different cultures and languages. We sought to describe preferences in decision making and degree of SDM among Spanish-speaking caregivers receiving pediatric Otolaryngology care. We hypothesized that language-concordant encounters would have higher SDM scores. **METHODS**: A cross-sectional study of Spanish-speaking caregivers undergoing consultation with pediatric otolaryngology was performed (May-August 2022). Care was provided in a language-concordant (LC) setting in which the physician and caregiver communicate in Spanish, or a language–discordant (LD) setting in which the physician communicates with interpreter support. Following their appointment, caregivers were invited to complete the Spanish Control Preferences Scale (CPS, select 2 of 5 options) to determine their two most preferred roles in medical decision making, and the Shared Decision-Making Questionnaire (SDM-Q-9; scored 0-100) to assess perceived SDM. Descriptive statistics, Fisher's exact and the Mann-Whitney U test were used for analysis. **RESULTS**: Sixty-one caregivers were enrolled. CPS scores revealed the passive-collaborative medical decision making role was the most favored (59%), followed by an active-collaborative role (26%), and passive role (13%). Median SDM-Q-9 score for all caregivers was 100.00 (mean=93.70). The median SDMQ-9 score was 100 in LC visits, and 97.78 in LD visits (p = 0.428). No differences in SDM-Q-9 scores were detected for CPS categories between LC and LD visits. **CONCLUSION**: High levels of SDM were observed among Spanish-speaking caregivers using both LC and LD care. Most caregivers preferred a passive-collaborative role in medical decision making. Results may be influenced by positive response bias given the high scores observed. Further studies with larger sample sizes can further our understanding of the impact of LC care in SDM.

Key words: Shared Decision Making; Pediatric Otolaryngology; Language Concordant Care (Source: MeSH-NLM).

23. **THE EFFECT OF THE PSYCHIATRIC CO-MORBIDITIES OF MIGRAINE IN MEDICAL UNIVERSITY STUDENTS: A CROSS-SECTIONAL STUDY**

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▶ https://www.youtube.com/watch?v=vlsNiqV1-28&t=16771s

BACKGROUND: Migraine is a common neurological disorder with significant psychiatric co-morbidities and impact on quality of life. Medical students routinely have triggers, notably stress and irregular sleep, which are typically associated with migraine. The present study aimed to assess the effect of the psychiatric co-morbidities of migraine on medical university students. **METHODS**: We conducted a descriptive cross-sectional study at Khartoum University on 356 students chosen by a multi-stage stratified sampling for the batch and gender, followed by a simple random sampling using self-administered questionnaires. Our survey consisted of the Patient Health Questionnaire 4-item (PHQ-4) to examine the effect of the psychiatric co-morbidities of migraine on medical students at Khartoum University. Migraine diagnosis was made according to ID Migraine. We analyzed the data using SPSS Software version 26. **RESULTS**: The participants included 63.8% females and 36.2% males. The age of the participants ranged from 17–26-year-old, with the majority between 20-23 years old. Additionally, 73.6% of the students were caffeine consumers, and 6.5% were smokers. In addition, 66% of medical students confirmed having two or more general headaches during the past three months. The prevalence of migraine was 27.25% in the whole study group. According to the PHQ-4 scoring system, (36%) had mild psychological distress (score: 3-5), (28.9%) reported severe distress (score: 9-12), while (24.7%) and (10.3%) reported moderate (score: 6-8) and none (score: 0-2) psychological distress, respectively. There was a significant association between the intensity of migraine without medications and the psychological status of the patient ($P < 0.05$). **CONCLUSION**: In conclusion, the effect of the psychiatric co-morbidities of migraine was variable among medical students at Khartoum University. Our study findings revealed a significant association between the intensity of migraine without medications and the psychological status of the patient. However, these results need to be affirmed by furthermore research with a large sample of medical students in different universities in Sudan.

Key words: Medical Students; Migraine; Psychiatric Co-Morbidities; Characteristics; Impact (Source: MeSH-NLM).

Abstracts

24. **EFFECTS OF NEAR-PEER MOTIVATIONAL INTERVIEWING TEACHING ON GREEK MEDICAL STUDENTS**

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[2] Sixth-year Medical Student. Aristotle University of Thessaloniki, Thessaloniki, Greece.
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▶ https://www.youtube.com/watch?v=vlsNiqV1-28&t=22579s

BACKGROUND: Obesity presents as a significant and increasingly prevalent public health problem globally. Greece reported an adult obesity rate of 17% in 2016 (OECD) and a more alarming paediatric overweight/obesity rate of 1 in 3 children (WHO). However, weight management can be difficult to negotiate and implement successfully with patients. Previous studies have reported positive results when utilising Motivational Interviewing (MI) techniques in these consultations. To ensure that healthcare systems are well-equipped to deal with increasing obesity rates, it is important to develop MI skills in medical students. Near-peer teaching has been reported as an effective method to improve student learning, and a gap in the literature exists regarding this type of teaching initiative for MI skills. **AIM:** To introduce and assess the effects of near-peer MI teaching, with the focus on weight management, on the knowledge and skills of medical students with limited previous exposure to the topic. To evaluate and compare how different methods of delivering near-peer teaching material between in-person and online sessions affect teaching efficacy. **METHODS**: An interactive seminar was delivered in English/Greek, both in-person and online, for Aristotle University of Thessaloniki (AUTh) students in years 3-6 and year 6 respectively. Materials were adapted to the local context from curriculum and literature, and delivered by final year AUTh and KCL medical students based at AUTh. Each seminar consisted of a theoretical section and a practical section. First, a teaching sheet was handed out to the participants that accompanied a PowerPoint presentation. The latter included information on MI for the Overweight/Obese Population, as well as demonstration video clips on certain concepts. Following the presentation, participants were split into small groups to apply MI in a Role-Playing environment. Scenarios were handed out and practiced by two participants in each group, as well as Examiners' checklists for the observers. This process was repeated three times with different scenarios and participants, and each turn was followed by a short discussion to provide feedback. Anonymous pre- and post-teaching evaluation surveys were also distributed and returned immediately before and after teaching with both cohorts. **RESULTS**: There were 88 total participants, with 10 in the in-person and 78 in the online cohort. A significant improvement ($p < 0.001$) was seen for both in-person and online cohorts in 5-point Likert confidence ratings for using MI skills whilst consulting both simulated (95%CI, i-p[1.83,3.37];o[1.64,2.05]) and real (95%CI, i–p[1.71,3.09];o[1.56,2.00]) overweight/obese patients. The in-person cohort showed greater positive change across all question domains assessing confidence on session content compared to the online cohort, beginning with skills such as motivational interviewing. **CONCLUSION**: Near-peer education is an effective method to improve medical student confidence in MI skills, and suggests the potential success of a long-term student-led clinical communication skills course run alongside the core curriculum.

Figure. Confidence in Using MI Techniques with real Overweight / Obese Patients.
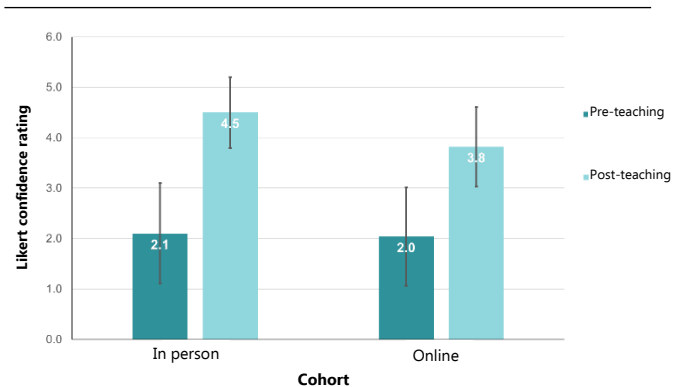
Key words: Teaching; Motivational Interviewing; Role Playing; Obesity; Medical Students; Greece (Source: MeSH-NLM).

25. **A RARE COMPLICATION OF CHRONIC OTITIS MEDIA: SEPTIC THROMBOSIS OF THE TRANSVERSE SINUS AND MENINGOENCEPHALITIS DUE TO A PARAMENINGEAL INFECTION. A CASE REPORT**

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[2] MD, Clinical Neurologist, Universidad Nacional de Colombia. Master in HIV, Rey Juan Carlos University, Madrid-Spain. Training in Neuroinfectology, Instituto de Infectologia Emílio Ribas, São Paulo – Brazil. Neurologist at Hospital Federico Lleras Acosta - Clínica Medicadiz - Clínica Sharon, Ibagué. Professor at the University of Tolima. Coordinator of the Academic Group in Neuroinfections and Systemic Diseases of the Colombian Association of Neurology.

[3] MD, Universidad Cooperativa de Colombia.

▶ https://www.youtube.com/watch?v=vlsNiqV1-28&t=21105s

BACKGROUND: Septic cerebral venous sinus thrombosis or septic cavernous thrombosis is an extremely rare disorder, with 2 to 13 cases per million per year, following the introduction of antibiotics and advances in diagnostic imaging. It is a complex pathology, difficult to diagnose and life threatening. It has a high risk of otoneurologic sequelae, and it requires follow-up by various specialties, as treatment is medical and surgical, including neurology, internal medicine, intensive care, otorhinolaryngology, and infectiology, among others. Due to the low occurrence of septic cavernous thrombosis, the diagnosis may be erroneous or delayed, increasing complications and mortality. It is essential to perform a complete physical examination with emphasis on the ophthalmological, otological, rhinosinusal and neurological examinations, which is why this case is described. **THE CASE**: We describe a 77-year-old male patient, with history of high blood pressure, nasopharyngeal carcinoma in remission, bilateral hearing loss, prostatic hyperplasia, otitis media, and chronic mastoiditis. He was admitted due sudden onset of difficulty standing, gait instability, mutism, unquantified fever spikes, headache, and vertigo. The initial laboratory tests only revealed a complete blood count with leukocytosis. A simple brain computed tomography (CT) scan did not show relevant findings; therefore, a lumbar puncture (LP) was carried out due to suspicion of bacterial meningoencephalitis. Analysis of cerebrospinal fluid (CSF) showed pleocytosis with a predominance of polymorphonuclear cells, hypoglycorrhachia and hyperproteinorrhachia. Empirical antibiotic therapy was started with Vancomycin and Cefepime. At day five since onset of symptoms, he did not have improvements of his symptoms, so a new LP was carried out and antibiotic therapy was escalated. In the CSF it was found an increased cellularity with greater hypoglycorrhachia, persistent hyperproteinorrhachia, and cellular shift to lymphocyte predominance. A contrast-enhanced magnetic resonance imaging (MRI) of the brain was requested, showing pyogenic ventriculitis and decreased flow at the left transverse sinus, suggesting possible thrombosis, which was later confirmed with a contrast-enhanced brain angio-MRI. Furthermore, due to the otological involvement, a CT scan of the ears was performed, which showed severe bilateral otomastoiditis with bilateral mastoid cholesteatomas, bilateral otitis externa, and osteomyelitis of the left petrous apex. A diagnosis of a septic thrombosis of the left transverse sinus, in the context of meningoencephalitis secondary to a parameningeal focus, was made. Treatment with Meropenem 1 gr intravenously every 8 hours and Vancomycin 1 gr every 8 hours was continued up to 28 days. During the hospitalization, otorhinolaryngology did a mastoidectomy and continued outpatient antibiotic management with Ciprofloxacin for seven more days. The patient did not require anticoagulation, and at follow-up he was notably recovered, and in control studies the recanalization of the thrombosis was confirmed. **CONCLUSION**: Septic cerebral venous sinus thrombosis is a rare pathology, but with a high associated morbidity and mortality, which requires multidisciplinary management. It is vital to know its pathophysiology and predisposing factors to include it in differential diagnoses when managing a patient with meningeal symptoms.

Figure. Contrast-Enhanced Magnetic Resonance Imaging in the Venous Phase Showing an Obstructed Left Transverse Sinus (blue arrow).
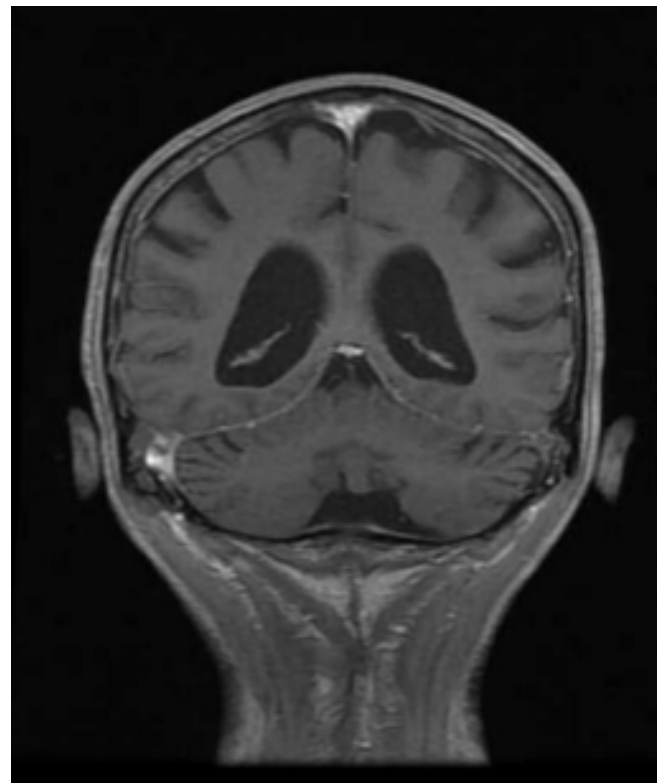
Key words: Septic thrombosis; Dural Venous Sinuses; Meningoencephalitis; Otitis Media; Mastoiditis (Source: MeSH-NLM).

Abstracts

AWARD FOR BEST CASE REPORT PRESENTATION AT THE WCMSR BASED ON JUDGE SCORES, 1st PLACE:

26. **A RARE CASE OF CANDIDA PARAPSILOSIS EMPYEMA THORACIS**

Arielle E. Solomon[1].

[1] First-year Medical Student. Louisiana State University Health Sciences Center, New Orleans, USA

https://www.youtube.com/watch?v=vlsNiqV1-28&t=26978s

BACKGROUND: This case report describes a patient with pleural empyema that grew Candida parapsilosis, an unexpected finding, especially in an immunocompetent individual with no prior surgery or trauma to the area. Candida empyema is a rare infection associated with mortality rates as high as 61.9%. **METHODS**: A 63-year-old male with a past medical history of pulmonary emboli was in his usual state of health when he developed worsening left-sided chest pain over 3 days, with associated shortness of breath and productive cough that was blood-tinged on occasion. Extensive imaging and a diagnostic thoracentesis confirmed an expanding left-sided parapneumonic effusion that was drained and found to grow Streptococcus anginosis and Candida parapsilosis. During his hospitalization, the patient also demonstrated increased alkaline phosphatase levels without abdominal pain or elevation in AST, ALT, or bilirubin, prompting further diagnostic imaging. Ultrasound of the abdomen showed a large, heterogeneous liver; follow-up CT scan, which was done without contrast due to worsening acute kidney injury, did not rule out liver masses. The patient's clinical condition began to significantly improve following drainage of the pleural effusion and removal of the chest tube. After his kidney function returned to baseline, the patient was discharged with the remainder of his 18-day courses of amoxicillin-clavulanate and fluconazole, with a contrasted CT of the abdomen scheduled in the outpatient setting. **CONCLUSION**: This is an unusual case of fungal empyema, a severe manifestation of invasive candidiasis with a poor prognosis. Given the paucity of studies on Candida empyema, there is no definitive treatment for this deadly infection. A 2021 retrospective study of 81 patients with Candida empyema at two academic centers posited that optimal management included pleural drainage and fluconazole treatment. The same study found that 20% of Candida empyema originated from intra-abdominal sources. As for the patient in this case report, there remains the possibility that upcoming outpatient contrasted CT imaging of the abdomen will reveal the source of his infection.

Key words: Thoracic empyema; Infectious Disease; Medicine (Source: MeSH-NLM).

27. **SLEEP HYGIENE, MEDIATING THE ASSOCIATION BETWEEN CIRCADIAN TYPOLOGY AND PSYCHOLOGICAL DISTRESS: AN ASSOCIATION ELICITED BY MEDIATION ANALYSIS MODEL AMONG YOUNG SUDANESE ADULTS, 2022-2023**

Ahmed Abdelghyoum Mahgoub[1,3,4], Shima Algam Mohamed Musa[3,5], Fatima Fathelrahman[3,4], Arwa Abdelmonem Abdelaziz[3,5], Magid Omer Mahmoud[3,5], Ayad Abdalla Hamad Elneel[2,3], Anas Jafar Alsedeeg[2,3], Reham Abdelmoneim Taha[3,5], Ayman Izzeldin Hamad[3,5], Adnan Abdelrahman Eltayeb[3,5], Maab Osama Taj Elser[3,5].

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[5] Al-Neelain University, Faculty of Medicine.

▶ https://www.youtube.com/watch?v=vlsNiqV1-28&t=14954s

BACKGROUND: Circadian rhythms are regulated by genetic and environmental components. The association of intrinsic and extrinsic factor modulates physiological and individual sleep schedules sleep hygiene and even different chronotype. Evidence suggests evening-type individuals have a higher risk of reporting psychological distress than morning-type individuals. However, less is known regarding the underlying processes that might mediate this association among Sudanese young adults. This study aimed at assessing the mediating role of sleep hygiene on the relationship between circadian typology and psychological distress among young Sudanese adults. **METHODS**: This is a cross sectional study. Conducted among medical students, graduates and medical interns of Al-Neelain University. Between April and August 2022. Morningness–Eveningness 19 items Questionnaire (MEQ) was used to assess chronotype preference. Kessler10-item Questionnaire was used to assess Psychological Distress, and sleep hygiene index (SHI) was used to screen Sleep hygiene behaviors. Hayes PROCESS macro (model 4) was used to perform the mediation analysis. **RESULTS**: Among 303 medical students who complete the study questionnaire. Mean of age for study participants was (22.71±2.49). Sleep hygiene index mean score was (29.35±5.46) indicating poor sleep hygiene behaviors. Most of the population were Neutral in their circadian typology preference (58.1%). (89.8%) of our population had psychological distress, Chronotype correlated with severe psychological distress and poor sleep hygiene behaviors (r=-0.141, P<0.05) (r=-0.292, P<0.001) respectively. Poor sleep hygiene behaviors also correlated with severe psychological distress (r=0.466, P<0.001). Individuals who were severely psychologically distressed mostly had higher sleep hygiene mean scores than normal individuals (29.35±5.46), (21.61±6.42) (p<0.001). Sleep hygiene index scores were lower for Morning circadian typologies [definite Morning 22.50± (7.00), moderate morning 24.89± (5.63)] compared to evening typologies [definite evening 32.25± (4.43), moderate evening 29.00± (6.09)]. Which indicated good sleep hygiene behaviors for Morning chronotype groups. Figure 1.0 illustrates the distribution of mean sleep hygiene index scores across circadian preference groups. Multiple regression analysis results showed that there was no significant direct effect of chronotype on psychological distress β =-.0096, SE= .0496, t=-.1937, P=.8466, CI [-.1073-.0881]. We also found a significant indirect effect of sleep chronotype on psychological Distress (β =-0.113, SE=0.0265, CI [-.1698 - -.0649]. According to bias-corrected percentile bootstrap method the total effect was negatively significant, (β =-0.123, SE=0.0534, t=-2.30, p<0.05, CI [-0.2280 - -0.0178], indicating a full complimentary mediation between evening chronotype and impaired psychological wellbeing through sleep hygiene behaviors. **CONCLUSION**: Sleep hygiene was found to mediate the correlation between eveningness and impaired psychological wellbeing, Improvement of Sleep hygiene behaviors is advised to enhance morning circadian typology as to prevent and reduce psychological distress. Interventions to enhance morning circadian typology should be prioritized to medical students, graduates and medical interns who are prone to eveningness to minimize the risk for psychological distress.

Figure. Sleep Hygiene Index Score Mean Distribution Across Different Circadian Preference.
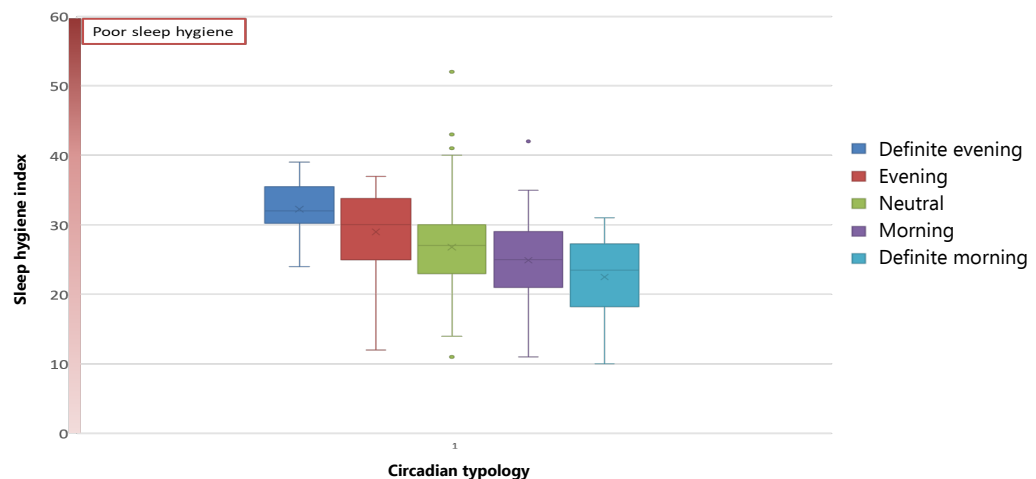
Key words: Physiological Stress; Quality; Sleep; Psychological Wellness; Medical Students (Source: MeSH-NLM).

Abstracts

28. **UNDERSTANDING SUICIDAL BEHAVIOUR AND DISTRESS IN YOUNG MUSLIM CANADIANS: A QUALITATIVE STUDY**

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https://www.youtube.com/watch?v=vIsNiqV1-28&t=28316s

BACKGROUND: Suicide is a major public health concern worldwide, including in Canada. The onset of major mental illnesses occurs during adolescence and young adulthood. Among this group, young Muslims in Canada may be particularly vulnerable due to unique stressors and emerging evidence indicating that Muslims in the U.S. report more suicide attempts than other religious groups. To our knowledge, no prior study has undertaken an in-depth exploration of the lived experiences of Muslim young adults who have attempted suicide. This study aims to broaden our understanding of how Muslim young adults experience and understand suicidal behavior by exploring narratives of distress and help-seeking, the meanings of suicidal behavior, the impact of immigration/resettlement, discrimination, Islamophobia, and the role of negotiating multiple religious, cultural, and gender identities. **METHODS**: This study is currently in progress. We are recruiting approximately 25-30 Muslim youth between the ages of 15-24 who have experienced suicidal behavior with any intent to die, as reported by the participants themselves, within the Greater Toronto Area (GTA). Exclusion criteria include (1) active substance intoxication or withdrawal, (2) current admission to a psychiatric facility, and (3) low levels of intellectual functioning or a history of neurological impairment. We are conducting heterogeneous purposive sampling to ensure that our sample includes diversity in terms of gender, age, countries of origin, and first and second-generation youth. Recruitment will end when data saturation is reached. Each participant will take part in a semi-structured qualitative interview. The interview explores family and social contacts, immigration/acculturation experiences, gender and cultural roles, and views on religion. Data is being transcribed and analyzed in N-Vivo 12 software using constructivist grounded principles entailing simultaneous collection and analysis, inductive construction of abstract categories explaining social processes, sampling and categorical refinement through iterative analysis, and integration of categories into a theoretical framework. **RESULTS**: Preliminary data analysis is in progress based on participants (n=15) recruited thus far. Emerging themes in relation to the causes of suicidality include isolation and an inability to cope with multiple stressors, such as family conflict and physical illness. Religion has a varied effect on suicidality, ranging from minimal to strong influence and from being protective to triggering suicidality. Regarding barriers to care, emerging themes included fear of invalidation, Islamophobia, and the lack of cultural safety within the healthcare system. Notably, youth appear to have a different explanatory model for mental illness compared to their family/community. **CONCLUSION**: This is the first qualitative study examining the experiences of Canadian Muslim youth who have experienced suicidal behavior. Our findings will help elucidate the unique stressors and protective factors that influence suicide and suicidal behavior for Canadian Muslim youth. Understanding patterns of distress and barriers to care through qualitative analysis will provide critical context to ultimately develop appropriate and effective screening, service provision, and suicide prevention strategies.

Key words: Suicide; Youth; Psychiatry; Qualitative; Canada (Source: MeSH-NLM).

29. **ORTHOPAEDIC SURGERY IN THE METAVERSE: CURRENT DATA ON VIRTUAL-REALITY BASED TRAINING**

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https://www.youtube.com/watch?v=vlsNiqV1-28&t=11833s

BACKGROUND: Immersive, realistic, and low-risk training has long been ideal for skill-based disciplines such as surgery. Recent advances in virtual reality technology have led to development of surgical training software with the goal to provide experience without risk. The aim of this review is to summarize the current data for virtual reality-based orthopaedic surgery training to evaluate how beneficial the technology may become in educational circumstances. **METHODS**: A literature review was completed analyzing eight randomized controlled trials completed between 2019 to 2022 to evaluate the effect of virtual reality on orthopaedic surgery education for medical students and residents. Each trial included groups of learners that were trained on a specific procedure with standard methods ("control") or virtual reality software ("VR group"). Subjects were then evaluated on completion of procedures with real-life models. Procedures included total hip arthroplasty (n=2), tibial intramedullary nail (n=2), slipped capital femoral epiphysis pinning (n=2), and unicompartmental knee arthroplasty (n=2). The primary metrics assessed were time to complete procedure and objective assessment scores. Secondarily survey results were evaluated regarding subjects' perceived utility of virtual reality in orthopaedic surgery training. **RESULTS**: 168 subjects (medical students n=68, residents n=100) were included across the 8 different trials. All trials included at least one objective assessment and it was found that overall, the VR group performed 19.9% better than control group on average (19.875 ± 18.324, 95% CI). Seven of the trials reported time to complete procedure, in which it was found that overall VR group completed the procedures 12% faster than control group on average (12 ± 10.988, 95% CI). Subjective measures showed that over 70% of subjects found the VR learning to be at least "helpful" or "useful". **CONCLUSION**: Early studies of the emerging field of virtual reality in surgical training are promising. When looking at objective measures and time to complete procedures, VR trained learners perform as well, if not better, than standard method learners. Inclusion of virtual reality-based practice in medical school curricula and residency training may lead to less surgical errors, increased knowledge of procedures, and more efficient learning in real-life scenarios. This potential impact extends beyond well-resourced institutions, as VR technology can provide a cost-effective and accessible alternative for surgical training in low-income and low-resource areas of the world, democratizing access to high-quality medical education. Continued research on translation into clinical practice is warranted, with the potential to bridge educational disparities and improve surgical outcomes on a global scale.

Key words: Virtual Reality; Orthopaedics; Medical Education; Arthroplasty; Global Health (Source: MeSH-NLM).

Abstracts

30. BRONCHIECTASIS WITH TRANS MEDIASTINAL HERNIATION OF LEFT UPPER LOBE IN 3-YEAR-OLD CHILD: A CASE REPORT

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▶ https://www.youtube.com/watch?v=vlsNiqV1-28&t=5163s

BACKGROUND: Bronchiectasis is a disorder characterized by destruction of smooth muscle and elastic tissue due to inflammation which leads to permanent dilation of bronchi and bronchioles. It may develop in association with Cystic Fibrosis, a single severe episode or recurrent episodes of pneumonia and exposure to tuberculosis. The principal conditions associated with bronchiectasis are obstruction and infection. Infections primarily originate from issues with airway clearance, which cause bronchi and bronchioles to enlarge irreversibly. Vertical airways are notably affected, while distal bronchi and bronchioles are more severely affected. The degree of disease activity and chronicity may affect the histological findings. Childhood bronchiectasis can proceed to severe consequences including persistent bacterial bronchitis, in developing nations like India due to a lack of effective diagnosis and treatment as a result of poor health care infrastructure in the rural areas as well as limited awareness on the part of general public and health care professionals. **THE CASE**: A 3.5-year-old Indian boy presented with productive cough and cold for 8 days associated with low grade fever. Patient was admitted through Out Patient Department (OPD) due to respiratory distress and facial swelling. Clinical exam revealed presence of crepitation, wheeze and pectus carinatum. Patient has history of multiple hospital admissions due to pneumonia and respiratory distress. There is history of exposure to tuberculosis. His mother had been diagnosed with tuberculosis when the child was 3 months old. She received anti-tubercular drugs and is now cured. HRCT thorax reveals collapse of basal segment of right lung, trans-mediastinal space shift of left upper lobe and bi-lateral bronchiectatic changes which include unusually thickened enlarged airways exhibiting the characteristic tram-track appearance. Echocardiogram findings show thickened pericardium, mild pericardial collection and trace tricuspid valve regurgitation. The case is unique since it is quite rare for a young child to have such a severe form of bronchiectasis. **CONCLUSION**: Diagnosis can be done with the help of radiological and clinical examination. However, High Resolution Computed Tomography (HRCT) scan is the investigation of choice. Early management is a key factor in minimizing more serious complication like severe hemoptysis and cor pulmonale. Current treatment modalities include antibiotics, bronchodilators, anti-inflammatory drugs and chest physical therapy. Severe cases may require injectable antibiotics. Bronchiectasis was thought to be an orphan disease that seldom progressed to severe consequences, especially after the introduction of newer antimicrobials. There exist guidelines that advocate treatments for bronchiectasis, and reports of therapy have been shown to be linked with clinical success. However, such guidelines do not exist in India at present. This case is noteworthy as it portrays bronchiectasis in an Indian child that has proceeded to the severe complication of transmediastinal herniation, demonstrating that it is relatively common albeit under-diagnosed in developing countries. Though is an irreversible disease in adults, in children if detected early there is almost complete restoration of pulmonary function and adequate exercise tolerance. Early diagnosis with suitable pharmacological and non-pharmacological management is critical for a positive outcome and prevention of sequelae like persistent bacterial bronchitis.

Figure. Digital Radiograph Showing Tram Track Appearance of Bronchioles and Collapse of Lower Segment of Right Lung.

Key words: Bronchiectasis; Case Report; Pneumonia; Pectus Carinatum (Source: MeSH-NLM).

31. **A COMPARATIVE CROSS-SECTIONAL STUDY ON THE PREVALENCE OF IMPOSTOR PHENOMENON IN MEDICAL AND NON-MEDICAL STUDENTS OF LAHORE CITY**

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▶ https://www.youtube.com/watch?v=vlsNiqV1-28&t=1102s

BACKGROUND: The Imposter Phenomenon (IP) is a psychological pattern emphasizing feelings of uncertainty and inadequacy despite evidence and acknowledgement of one's competence and accomplishments. It is commonly found among excelling individuals who believe that they have somehow "tricked" others into thinking that they are more capable than they are. There are over 1200 published researches on Impostor Phenomenon since 1978 and this has led to the development of various measurement scales but the Clance Impostor Phenomenon Scale is the most commonly used instrument by researchers. Till now, there have been various researches regarding the prevalence of the IP among students but there has yet to be a study on a comparison between medical and non-medical students. **AIM:** The aim of this study is to compare the prevalence and distribution of Imposter phenomenon among medical and non-medical students, as well as to compare the difference in its distribution between males and females. **METHODS**: A cross-sectional comparative research design was used on a sample of 242 medical and non-medical students of CMH Lahore Medical and Dental College and Lahore University of Management Sciences (LUMS), respectively. The inclusion criteria were medical and non-medical students of both universities while the exclusion criteria were students, who refused to give consent. Data was collected from January to April 2023 and all participants completed a questionnaire based on the Clance Impostor Phenomenon (CIP) scale. After the collection of the data, it was assessed using SPSS version-26 and the the Clance Impostor Phenomenon score was calculated. The CIP score is organized into 4 sets and suggests the range of Impostor Phenomenon (IP) characteristics: <=40 total score (Mild IP), 41-60 total score (Moderate IP) 61-80 total score (Frequent IP characteristics), >=81 total score (Severe IP) **RESULTS**: After analyzing, using unpaired T-test on the data, the study showed both medical and non-medical students experience imposter phenomenon to a certain degree but the prevalence of imposter phenomenon was found to be significantly higher among LUMS (non-medical) students as compared to CMH (medical) students. The total CIP score determined the severity of IP and showed LUMS having a higher mean value of 67.08 (±13.704), and CMH having 58.36 (±11.413) suggesting much more frequent IP characteristics in non-medical students. It was also noted that although the Imposter phenomenon is observed in both genders, it is much more significant in females with a mean of 68.39 (± 13.737) and 58.52 (±11.345) for males, again showing females to experience frequent impostor phenomenon characteristics. **CONCLUSION**: In conclusion, this study provides evidence that imposter phenomenon is prevalent among both medical and non-medical students and it highlights the need for educators and mentors to focus on the prevailing issue so that this phenomenon can be countered for their future professional growth.

To break the vicious cycle of negativity, effort needs to be put in by both students and teachers to be able to achieve positive results.

Table. T-test Comparing Both Universities with their Respective Total CIP Score.

	CMH		LUMS			
	Mean	St. Dev	Mean	St. Dev	t	P-value
Total CIP Score	58.36	11.413	67.08	13.704	-5.383	0.000

Key words: Mental Health; Prevalence; Comparative Study (Source: MeSH-NLM).

Abstracts

32. **ANTERIOR PITUITARY ENDOCRINE DYSFUNCTIONS IN PATIENTS WITH TRAUMATIC BRAIN INJURY IN THE NEUROSURGICAL UNITS OF THE YAOUNDE CENTRAL AND GENERAL HOSPITALS: A CROSS-SECTIONAL STUDY**

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BACKGROUND: Post-traumatic endocrine dysfunction (PTED) is an important and relatively common complication of TBI (traumatic brain injury). It is usually undiagnosed and untreated making it a major cause of poor outcome in TBI patients as it can lead to death, delayed recovery, cognitive impairment, depression, sexual dysfunctions and infertility. **STUDY DESIGN**: Analytic cross-sectional study at the Yaounde Central and General Hospitals from January 2022 to April 2022. **AIM:** The main aim of this study was to evaluate the endocrine dysfunctions and factors associated to their occurrence in patients presenting TBI at the neurosurgical units of the Yaounde Central and General Hospitals. **METHODS**: Patients were enrolled at the neurosurgical units Data was collected with the help of a questionnaire after obtaining their informed consent alongside with blood samples in the morning (between 8AM and 10AM) for screening of anterior hypothalamo-pituitary axis hormones (FSH, LH and TSH) and relative peripheral hormones (cortisol, T4, oestrogene in women and testosterone in men) using fluorescence immunoassay. The study population was made up of all patients diagnosed with TBI during the study period at study sites. Patients taking medications affecting the hypothalamo-pituitary axis were excluded. Variables of interest included socio-demographic variables, clinical variables and paraclinical variables. Data was inserted and analyzed using the software Statistical Package for Social Sciences (SPSS) version 26.0. Association between variables was done using Fisher's exact test. The association measure used was odd's ratio (OR) with confidence interval (CI) of 95%. **RESULTS**: A total of 33 participants were enrolled, out of which 26 responding to our inclusion criteria were retained and 7 excluded because they were on medications affecting the hypothalamo-pituitary axis. The median age of participants was 34 (26,75–41,25) years. There was a predominance of the male population with a sex ratio of 12:1. A total of 17 participants developed PTED (65.38%). The PTED encountered were FSH deficiency (12 patients at 46,1%), LH deficiency (10 patients at 38,4%), morning cortisol deficiency (5 patients at 19,2%), TSH deficiency (7 patients at 26,9%), testosterone deficiency (5 patients at 19,2%) and multiple deficiencies (12 patients at 46,1%). PTED was also found in 6 patients with severe TBI, 6 patients with moderate TBI and 5 patients with mild TBI (35.3%, 35.3% and 29.4%). In ≤7 days from TBI, 11 patients suffered PTED (64.7%) while after 7 days post-TBI, only 6 patients suffered PTED (35.3%). Tiredness was the most frequent symptom observed in 15 patients with PTED (88.2%). No factors associated to the occurrence of PTED were found in this study (p-values were all >0.05). **CONCLUSION**: This study suggests that PTED is a common condition amongst sufferers of TBI. PTED occurs in both genders and the most frequent types of anterior pituitary endocrine dysfunctions were hypogonadism, hypothyroidism and lastly corticotropic insufficiency. Most patients with PTED had associated CT-scan lesions. No factors was significantly associated to the occurrence of PTED probably due to small sample size.

Key words: Traumatic Brain Injury; Post-Traumatic Endocrine Dysfunction; Hypothalamo-Pituitary Axis (Source: MeSH-NLM).

33. **SURVIVING A TRIPLE COINFECTION IN AN HIV PATIENT: TUBERCULOSIS HISTOPLASMOSIS AND SARS-COV-2: CASE REPORT**

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▶ https://www.youtube.com/watch?v=vlsNiqV1-28&t=15431s

Figure. AP chest X-ray, bilateral diffuse miliary pattern.

Key words: AIDS; Human Immunodeficiency Virus; Mycobacterium Tuberculosis Infection; Histoplasma Infection; Case Study (Source: MeSH-NLM).

BACKGROUND: Antiretroviral therapy has become the key to global control of the HIV/AIDS pandemic. The human immunodeficiency virus (HIV) is a retrovirus that attacks CD4+ T lymphocytes. AIDS is defined by a CD4+ count of less than 200 cells/mm^3, as well as the appearance of opportunistic infections, which are the main cause of death in these patients. The most common types of co-infections are Mycobacterium tuberculosis, hepatitis C virus, Cryptococcus neoformans, Plasmodium falciparum, and hepatitis B virus. The incidence of certain opportunistic infections will continue to be a problem, especially in developing countries where access to antiretroviral therapy remains limited. **THE CASE**: A 27-year-old male patient from Juticalpa, Olancho, with a history of HIV/AIDS C3 diagnosed on January 23, 2022, with a CD4+ lymphocyte count of 115 cells/microliters and a viral load of 10,000 copies/ml, goes to his health center from his department with a history of fever, intermittent type, quantified at 40 Celsius, predominantly nocturnal, attenuated with acetaminophen, without exacerbations. Among its accompanying symptoms, general malaise and fatigue, he received treatment of which the patient is unaware. Five days after his last visit, the patient returned in poor hemodynamic condition, dehydrated, with persistent fevers of 40 Celsius and respiratory difficulty, for which fluid therapy and oxygen were started. Antigen for SARS-COV-2 is requested with a positive result, for which the patient is transferred to Tegucigalpa to the Instituto Nacional Cardiopulmonar del Torax a third level hospital. Upon admission to our hospital, hemodynamically unstable, Glasgow 14/15, it was decided to perform GENXPERT, sputum and antigen for histoplasmosis and tuberculosis, which were both positive. It was decided to transfer the patient to the intensive care unit, where he received treatment with isoniazid 300 mg orally, rifampicin 600 mg orally, ethambutol 1200 mg Monday, Wednesday and Friday, and pyridoxine 50 mg orally. Likewise, liposomal amphotericin B 280 mg was administered. Twenty days later, the patient was stable after extubating. He was transferred to a respiratory isolation room to receive treatment for COVID-19 and pulmonary tuberculosis. **CONCLUSION**: Co-infections between HIV and COVID-19 and tuberculosis with COVID-19 are currently poorly known. To date, only six cases of triple co-infections in HIV patients have been reported worldwide in Panama, the United States, Brazil and Cameroon. Due to the great clinical similarity, an in-depth differential diagnosis should be made between COVID-19 and tuberculosis. Timely diagnosis and treatment improve patient survival rates.

Abstracts

34. **THE COMPARATIVE EFFICACY OF ANTI-AMYLOID AND NON-ANTIAMYLOID DRUGS FOR TREATMENT OF ALZHEIMER'S DISEASE: A NETWORK META-ANALYSIS**

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▶ https://www.youtube.com/watch?v=vlsNiqV1-28&t=4446s

BACKGROUND: Alzheimer's disease is a degenerative neurological disorder that contributes 60-80% of all dementia cases, typically occurring at the age of 65 years. Currently available therapeutics for treatment are only capable of limiting the progression of cognitive decline. The focus of many Alzheimer's disease drug therapies involves the hypothesized cause of pathogenesis in the disease, beta protein in the brain. Based on the Preferred Reporting Items for Meta-Analysis (PRISMA) for Network Meta-Analyses (NMA) framework, the present study was conducted to compare the efficacy of such drugs that target beta-amyloid directly or indirectly, with that of other treatments studied in randomized controlled trials. **METHODS**: Utilizing a network meta-analysis, direct and indirect comparisons between interventions could be done, providing a ranking of intervention in terms of efficacy in treating cognitive symptoms of Alzheimer's disease. **RESULTS**: A total of 33 studies were included in four analyses of intervention trials that reported cognitive outcomes measured by Alzheimer's Disease Assessment Scale-Cognitive Subscale (ADAS-cog) or Mini-Mental State Examination (MMSE) score. Based on the findings, anti-amyloid agents did not show a marked advantage over other therapies in improving cognitive scores. Results showed that parasympathomimetic agents were consistently ranked higher in terms of Surface Under the Cumulative Ranking (SUCRA) score, with anti-tau agents providing a possible superiority over all other interventions at improving MMSE scores for treatments lasting longer than 24 weeks. High-dose anti-amyloid therapies were effective at improving MMSE score in short term treatments lasting not more than 24 weeks but fall behind other drugs in longer durations. **CONCLUSION**: For better understanding on the choice of anti-amyloid and non-antiamyloid therapies, future well-designed large studies including safety outcome and cost-benefit analyses on the different interventions are recommended. Additionally, anti-tau therapies show a clearer potential over anti-amyloid therapies and should thus be given more focus in future drug research.

Key words: Alzheimer's Disease; Amyloid Beta; Network Meta-Analysis; Randomized Controlled Trial (Source: MeSH-NLM).

35. **FRONTLINES AND CROSSROADS: THE IMPACT OF COVID-19 ON THE MOTIVATIONS OF MEDICAL STUDENTS FROM SELECTED PHILIPPINE MEDICAL SCHOOLS IN PURSUING THEIR MEDICAL STUDIES**

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▶ https://www.youtube.com/watch?v=vlsNiqV1-28&t=28929s

BACKGROUND: The onset of the COVID-19 pandemic made changes to the Philippine medical education system to transfer to an online setting, which meant the loss of practical skills needed for future clinical encounters. Most students consider the desire to serve others as their motivation to pursue medicine, but stated that online learning was more favorable for theoretical lessons and not for practical skills. These students had to cope with lifestyle changes which challenged their resolve, as well as deal with the technology and infrastructure required for online learning. The study aimed to compare the strength and nature of motivations of medical students to pursue their studies before and after the onset of the pandemic, and to propose recommendations to support them through the pandemic and beyond. **METHODS**: Semi-structured interviews were conducted using a study questionnaire that dealt with determining respondents' motivations for pursuing a medical degree, the impact of the pandemic and how it may have changed their motivations, and what recommendations they can propose to motivate other medical students. Interview transcripts were then analyzed through a qualitative inductive thematic analysis. Pre-clinical and clinical students (clerks and postgraduate interns) enrolled during SY 2020-2021 from Metro Manila and from among the 3 major Philippine island groups were selected to approximate the distribution of medical schools across the country. A total of 17 eligible participants were selected through purposive sampling of different personal backgrounds. Recruitment and call for participants were coursed through the Association of Philippine Medical Colleges - Student Network as well as through social media. Data from interview transcripts were familiarized and ideas from important recurring patterns shared among respondents' answers were made into codes, which were subsequently organized into themes both unique and generalizable across student groups. **RESULTS**: Six major themes arose: 1) Contextualizing the pre-clinical and clinical experiences, 2) Challenges of online learning; 3) Desire for lived experience; 4) Tensions between personal contexts and online learning; 5) Grit driven by a desire to serve; 6) Resilience over adversity and sunk cost. Most pre-clinical students were motivated to pursue medicine by a desire to serve, while clinical students were straightforward about financial reward as motivation. Despite the limitations of online education, lack of social interaction and skills training, medical students had strengthened motivations to continue their studies as the pandemic highlighted the need for physicians, reinforcing their intrinsic desire to serve others. Mental health and financial issues were a concern for some, but these students did not wish to quit so as not to lose momentum with their studies. **CONCLUSION**: While most medical students interviewed felt more motivated in pursuing their studies during the pandemic, there was a desire and a call for more support in their studies and training. Their personal stories suggested there is room for improvement in certain aspects of local medical education. Addressing their concerns through financial and educational support, and bridging clinical skills with online learning would thus help them create quality healthcare in the pandemic context and beyond.

Figure. Thematic Analysis Diagram of Pre-Clinical vs Clinical Students.
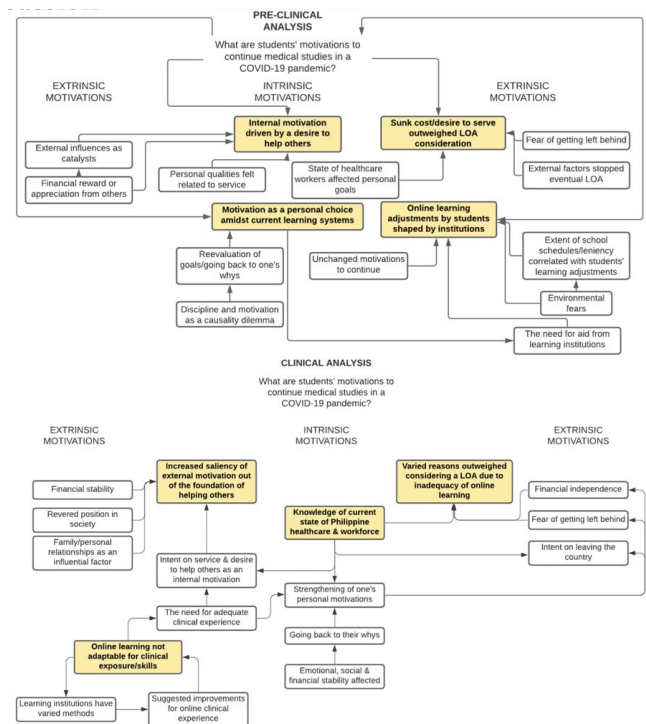
Key words: Medical Education; Online Learning; COVID-19; Motivation; Philippines (Source: MeSH-NLM).

36. **PRELIMINARY INSIGHTS INTO JWH182: A SYNTHETIC CANNABINOID'S NEUROPROTECTIVE ROLE AGAINST PACLITAXEL-INDUCED NEURONAL TOXICITY**

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https://www.youtube.com/watch?v=vlsNiqV1-28&t=12459s

BACKGROUND: Chemotherapy-induced peripheral neuropathy (CIPN), a frequently encountered consequence of neurotoxic chemotherapy, affects approximately 30 to 40% of patients. Taxanes are associated with an exceptionally high incidence of peripheral neuropathy, with Paclitaxel (PTX) accounting for approximately 70,8% of CIPN cases. Patient's symptoms are severe, compelling oncologists to consider dosage reduction or even complete abandonment of the treatment plan. Several recent studies have shown the potential efficacy of either synthetic, endogenous or phytocannabinoids in alleviating CIPN symptoms. In case of in vitro studies, neural protection can be assessed by measuring the axon length of the cultured neurons. Therefore, our study aimed to investigate whether the synthetic cannabinoid JWH182 could emerge as a promising new candidate for managing Paclitaxel-induced peripheral neuropathy, in case of an in vitro neural model. **METHODS**: Primary neuronal cultures were obtained from mouse-derived dorsal root ganglia (DRG) explants. The harvested ganglia were subjected to a series of enzymatic and mechanical dissociating processes, followed by a density-gradient centrifugation to isolate neurons, which were then seeded in Poly-D-Lysine coated 6-well plates and incubated for 24h. Thereafter, cells were exposed to an equal parts solution of 20 uM JWH182 and 1uM PTX. As a means of comparison, the neurons from the positive control group were exclusively exposed to a 1uM PTX solution, whereas the negative control group was left untreated. Photographs of the neurons were taken before the treatment and subsequently at 6, 24, 48 and 72 hours, with a particular focus on observing changes in axon length and cell viability. **RESULTS**: Unlike our positive control group, which displayed noticeable adverse effects on axon length, the sample treated with both PTX and JWH182 presented more promising outcomes. To be precise, there was a less important reduction in axon length at all time points following drug administration. In the meantime, the negative control exhibited no changes, maintaining a typical morphology and rate of axonal growth. **CONCLUSION**: These findings suggest that the synthetic cannabinoid JWH182 confers a protective effect on DRG neurons treated with Paclitaxel. As a result, this compound holds the potential to emerge as a novel treatment option for managing Paclitaxel-induced peripheral neuropathy. This could lead to the alleviation of symptoms in oncological patients, thereby enhancing their quality of life and their overall disease prognosis. Ultimately, these initial results lay the foundation for subsequent in vitro and in vivo experiments, aimed at validating our hypothesis.

Key words: Cannabinoids; Paclitaxel; Antineoplastic Agents / Toxicity; Peripheral Nervous System Diseases / Chemically Induced; Peripheral Nervous System Diseases / Therapy (Source: MeSH-NLM).

AWARD FOR MOST-LIKED RESEARCH PRESENTATION AWARDED BY THE PUBLIC:

37. METANALYSIS OF THE DIAGNOSTIC PERFORMANCE OF WESTERN BLOT FOR THE EARLY DIAGNOSIS OF CONGENITAL TOXOPLASMOSIS

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https://www.youtube.com/watch?v=vlsNiqV1-28&t=19860s

BACKGROUND: Congenital toxoplasmosis is an infection caused by the Toxoplasma gondii a protozoa obligate intracellular parasite that appears after a mother´s primary infection occurs during pregnancy. The congenital infection can cause severe symptoms such as: hydrocephalus, intracranial calcifications, seizures, hepatosplenomegaly, and chorioretinitis, leading to irreversible neurological and ocular lesions. Its early diagnosis is critical to obtain good outcomes after treatment where the western blot is considered as the gold standard. Western blot discriminate antibodies for specific proteins of the microorganism enabling differentiation between antibodies transmitted by mother from those elaborated by the newborn (compared immunological profiles) and can be obtained commercially or be elaborated by the clinical laboratory test ("house made"). However, there is not metanalysis about the diagnostic properties of the test that can support evidence-based recommendations for its use. **METHODS**: The research terms used were: "congenital toxoplasmosis" and "western blot". Databases for bibliographic searches were PubMed and Scopus, without restriction of date or language. Selection criteria were studies of evaluation of the diagnostic performance of western blot assay that included newborn with a definitive diagnosis of congenital infection by Toxoplasma according to the European network case definition (IgG anti-Toxoplasma persistent at 10 months of age) and controls that were defined by IgG antibodies that disappears in the serum of children in absence of treatment before six months of age. Screening and literature selection was done by the four researchers and disagreement were settled by reaching a consensus by discussion with mentor to avoid the erroneous exclusion of eligible articles. The PRISMA statement (http://www.prisma-statement.org/) was followed for quality assessment of the manuscript. The data were organized in an evidence table matrix, and sensitivity, specificity, and diagnostic odds ratio (DOR) index were calculated. **RESULTS**: The sensitivity obtained was 93.8 (95 CI: 79.2-98.4) and the specificity of 96.6% (95 CI: 89.8-98.9). However, heterogeneity was observed between the studies. Causes for heterogeneity were the different methods to elaborate the western blot assay. Commercial methods showed better performance that homemade methods. The results suggest that better accuracy can be obtained by using standardized commercial test. **CONCLUSION**: In conclusion, the meta-analysis supports the use of the Western Blot test as an effective method for the diagnosis of congenital toxoplasmosis in terms of sensitivity and specificity. However, further research is needed to establish more accuracy regarding sensitivity and specificity in the diagnosis in different settings by using well standardized assays.

Figure. DOR, the Diagnostic Probability Ratio of each of the Studies.
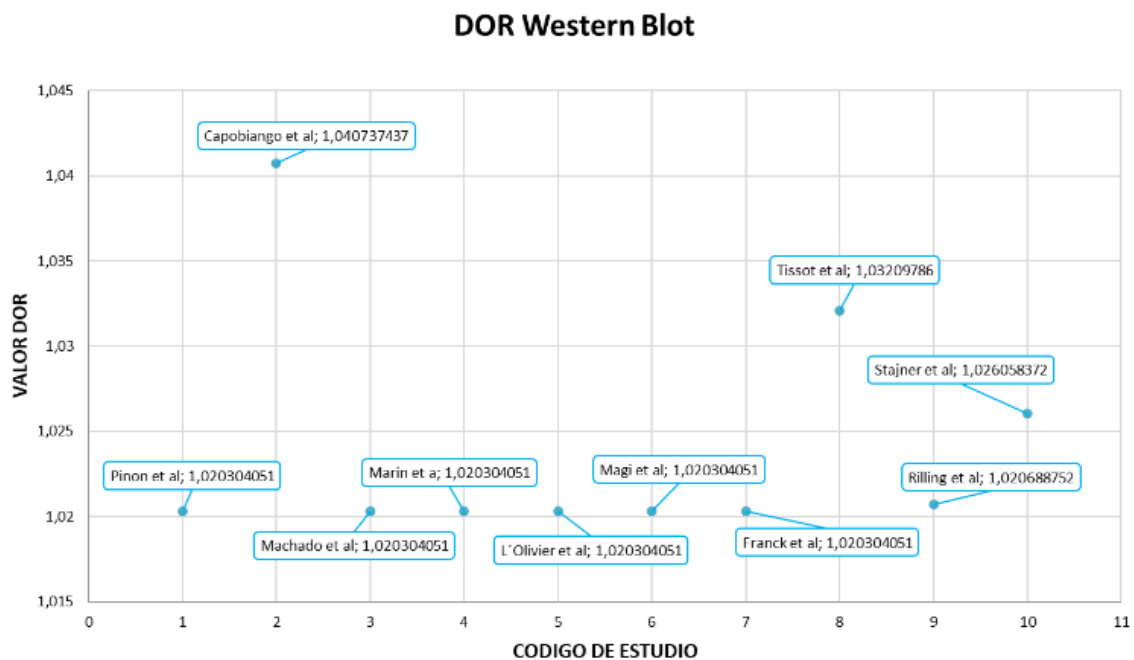
Key words: Congenital Toxoplasmosis; Western Blot. (Source: MeSH-NLM).

Abstracts

38. **MULTIFOCAL ACQUIRED DEMYELINATING SENSORY AND MOTOR NEUROPATHY (MADSAM) WITH CRANIAL NERVE INVOLVEMENT. CASE REPORT**

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▶ https://www.youtube.com/watch?v=vlsNiqV1-28&t=10174s

BACKGROUND: The multifocal acquired demyelinating sensory and motor neuropathy (MADSAM) is a rare adult onset subvariant of the chronic inflammatory demyelinating polyneuropathy (CIDP). The latter affects 1-9 cases per million adults and may pose a diagnostic challenge (antibody and electrophysiological overlap). The hallmark of the disease spectrum is an immune mediated structural myelin breakdown. Urgent differentiation of MADSAM from the other variants of CIDP is indicated due to its distinct pathogenesis, management, and long-term therapy response to immunomodulators. The disease presents with progressive asymmetrical motor and sensory deficits initially located typically in one limb. Rarely the disease manifests with cranial nerve involvement. The prognosis of patients suffering from MADSAM is reliant on rapid diagnosis and therapeutic response, but neurological deficits reside. Due to its rarity and diagnostic challenge, misdiagnosis is common. **THE CASE**: A 84 years old Caucasian male diagnosed with multifocal acquired demyelinating sensory and motor neuropathy (MADSAM) presented to our department with progressive neurological deficits. His neurological examination and history revealed paresthesia, hypesthesia, diminished vibration sense (pallhypesthesia), distally pronounced paresis in the upper extremities with a wrist drop on the left hand. Gait examination exposed coordination deficits. The history of the patient and the initial presentation of the disease in 1998 exemplifies the diagnostic challenge of MADSAM, due its mimicry of other diseases, like multifocal motor neuropathy (MMN). The initial symptoms were asymmetrical motor and sensory deficit starting at the upper extremities. Before the patient presented to our facility, he was diagnosed with neuroborreliosis and treated accordingly. The correct diagnosis was set at our department according to clinical presentation, nerve conduction velocity parameters and conduction block during electroneurography, typical changes in nerve ultrasound suggesting an inflammatory neuropathy and fasciculations of the gastrocnemius muscle. After an ineffective steroid therapy and long standing intravenous immunoglobulins the patient is now on a therapeutic scheme of 1000mg Rituximab (CD20 Ab) every 6 months and 1000mg Mycophenolatmofetil. The patient subjectively reports improvement of his status and slower progression of the disease since the Rituximab paradigm. Furthermore, an evident atrophy of the orbicularis oculi muscle was now noted during follow up examination, which highlights facial nerve involvement. **CONCLUSION**: This case exemplifies the challenge of diagnosing the multifocal acquired sensory and motor neuropathy, but prompt diagnosis and therapeutic intervention is associated with a better prognosis and slower progression of the disease in patients suffering from MADSAM.

39. **REVIEW OF BLOOD CULTURES TAKEN FROM ARTERIAL LINES IN JAMES COOK UNIVERSITY HOSPITAL: CONTAMINATION ANALYSIS AND COMPARISON WITH VENOUS SAMPLES**

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▶ https://www.youtube.com/watch?v=vIsNiqV1-28&t=14230s

BACKGROUND: Blood cultures are crucial diagnostic tools for identifying and treating bloodstream infections. Traditionally, venous blood is the preferred source for sample acquisition, but arterial lines offer an alternative. However, concerns regarding contamination and diagnostic accuracy have been raised, questioning the reliability of arterial line blood cultures. This study aimed to evaluate the contamination rates of arterial line blood cultures at James-Cook University Hospital (JCUH), UK and compare them with venous samples to understand their clinical utility better. **METHODS**: A comprehensive retrospective review analysed 17,643 blood culture samples collected between September 2022 and March 2023 at JCUH. Among these, 109 arterial line blood cultures and 785 venous peripheral adult samples were included for data analysis. Contamination rates were calculated as the number of positive blood cultures with contaminants per total positive samples (arterial or venous). The incidence of contamination was defined as the number of total blood cultures reported with contaminants per total samples (arterial or venous). No discrimination was made based on the number of contaminants found. Clinical information accompanying the blood cultures, such as the specification of arterial lines as 'new' samples, was also considered. **RESULTS**: The overall contamination rate at JCUH was found to be 4.99%. Specifically, the contamination rate for venous samples was 49.26%, while arterial samples had a higher contamination rate of 56.52%. The incidence of contamination from arterial samples was 11.92%, significantly higher than the incidence rate for venous samples at 3.18%. Most arterial samples were requested from intensive care units (ICUs) and highly dependent wards (HDUs), indicating potential areas for targeted interventions to improve blood culture collection practices. **CONCLUSION**: Arterial blood cultures demonstrated higher contamination rates compared to venous samples, raising concerns about their reliability. Contamination in arterial samples, particularly when collected from critically ill patients in ICUs and HDUs, can lead to inappropriate use of antibiotics, delayed, or missed diagnosis, and suboptimal patient outcomes. The study recommends targeted interventions to improve arterial blood culture collection practices and further training for healthcare workers involved in arterial line care. Encouraging the use of only 'new' arterial lines and implementing standardized protocols can help reduce contamination rates. Furthermore, the study identified certain limitations, such as potential human errors in data analysis and the need for a larger dataset of arterial line cultures. Extending the analysis to compare different sample sources like CVCs, Hickman lines, and central lines could provide a more comprehensive understanding of contamination rates across various culture collection methods. In conclusion, venous samples showed higher clinical favourability with a lower contamination rate, providing increased dependability for accurate diagnosis and management. Although some studies have not shown clear superiority of arterial samples over venous samples, this analysis highlights considerable differences in contamination rates, suggesting a potential inferiority of arterial blood culture samples. While efforts can be made to optimize the consistency of arterial samples and reduce contamination rates, their use should be approached with caution. Implementing the recommended measures is essential for accurate diagnosis, improved patient outcomes, and effective antibiotic management in clinical practice.

Key words: Blood Culture; Arterial Lines; Contamination (Source: MeSH-NLM).

Abstracts

PARTICIPATING RESEARCH

40. **BILIARY ASCARIASIS CAUSING OBSTRUCTIVE JAUNDICE: A CASE REPORT ON ERCP-ASSISTED MANAGEMENT**

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BACKGROUND: Biliary tract disorders are predominantly caused by cholelithiasis (gallstones). However, in regions endemic for parasitic infestations, or areas with poor hygiene and sanitation, hepatobiliary disorders may be due to an underlying worm infestation. **THE CASE** A 55-year-old female from Skardu, Pakistan, an Ascariasis-endemic area, presented to a tertiary care hospital with right hypochondrial pain and jaundice. Her condition did not respond to conservative treatment. Ultrasound (USG) and Magnetic Resonance Cholangiopancreatography (MRCP) identified multiple worms obstructing the common bile duct. Subsequently, an Endoscopic Retrograde Cholangiopancreatography (ERCP) procedure was performed, successfully retrieving the worms and achieving complete ductal clearance. The patient was discharged with oral anthelmintics and made a full recovery. **CONCLUSION**: This case underscores the importance of considering biliary ascariasis as a differential diagnosis for obstructive jaundice in endemic regions. MRCP emerges as a valuable diagnostic tool, providing a non-invasive and precise way to identify worm infestations of the biliary system. It effectively reduces the dependence on ERCP and its associated risks, reserving ERCP for therapeutic interventions. Equipping local healthcare centers in Ascariasis-endemic regions with the necessary resources to diagnose and treat these conditions is essential for mitigating patient suffering. This may lessen the need for travel to larger hospitals, minimising physical and financial inconveniences to the patient while also decreasing the burden on tertiary care hospitals.

Figure. Abdominal MRCP Showing Linear Filling Defect Extending from the Right Hepatic Duct to the Common Bile Duct.

Key words: Cholangiopancreatography Endoscopic Retrograde; Ascariasis; Cholangiopancreatography; Magnetic Resonance; Jaundice Obstructive; Gallstones; Biliary Tract Diseases; Pakistan (Source: MeSH-NLM).

41. **PEDIATRIC LIVER TRANSPLANTATION SECONDARY TO HEPATOBLASTOMA WITHOUT THE USE OF A KEHR'S T TUBE: A CASE REPORT**

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BACKGROUND: Hepatoblastoma is a common primary malignant tumor in the pediatric population, it has a PRETEXT staging depending on the degree of hepatic involvement, in this stage III central and IV are indications for transplantation. At the same time, it has sought to reduce the occurrence of post-transplant complications by not using a Kehr's T tube during the choledocho – choledochostomy, obtaining interesting results. **THE CASE** A 16-month-old woman diagnosed with PRETEXT IV hepatoblastoma, who received four cycles of chemotherapy (CTX) with cisplatin plus doxorubicin, adding two cycles of ICE, before her next cycle she was informed of the availability of a cadaveric liver graft, for this reason she received a liver transplant and during surgery it was decided not to use a Kehr's T tube. She remained stable on her first post-transplant day. On her second day, a collection in the hepatic hilum was evidenced by control Doppler ultrasound (US), placing two Blake drains. The following four days she had a favorable evolution, being discharged to transplantation floor with a downward trend of liver enzymes, where she continued with the same trend and US Doppler with adequate flows, leaving on day 19 post-transplant. One month later, she received two cycles of adjuvant CTX with CAV scheme. Currently, graft is functional and free of disease. **CONCLUSION**: Liver transplantation is the treatment of choice, reaching a survival rate of over 80% at five years post-transplantation. Furthermore, even though the technique of choice is hepaticojejunostomy, it was decided to perform a choledocho – choledochostomy without a Kehr's T tube, without the development of complications, which is consistent with results in the literature that show that the use of this technique prevents the appearance of complications in up to half of the cases, compared to when the tube is used. Also, adjuvant QT contributes to a better evolution and to obtaining a negative tumor marker, as was the case of the patient.

Key words: Pediatrics; Hepatoblastoma; Transplantation (Source: MeSH-NLM).

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42. KNOWLEDGE, ATTITUDE, AND PREVALENCE TOWARDS CERVICAL CANCER SCREENING AMONG WOMEN IN A NIGERIAN URBAN MUNICIPALITY

Faithful Miebaka Daniel[1], Williams Ibangha Ike[1], Monica Gbuchie Anurika[2], Saviour Udofia James[1], Perfection Chinyere Kalu[1], Sunday Ebizo Ikpa[1].

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[2] MBBS, Niger Delta University, Wilberforce Island, Nigeria.

BACKGROUND: Cervical cancer is a significant global health concern, particularly in less developed regions, ranking as the fourth most common cancer among women. Nigeria faces its crisis, with approximately 15,000 women diagnosed annually, resulting in a two-thirds fatality rate. An alarming 40 million Nigerian women remain at risk, underscoring the urgency of improved screening and disease surveillance, compounded by the absence of a national cancer policy and limited awareness. Cervical cancer can be reduced by more than 90% through regular screening. It is caused by sexually transmitted HPV and risk factors include multiple sexual partners, smoking, long-term oral contraceptive use, and immunosuppression. **AIM:** The study aimed to ascertain the knowledge, attitude, and practices toward cervical cancer screening and the factors that influence the practice of screening among women of the reproductive age group in Calabar Municipality. **METHODS**: Using a cross-sectional study design, 414 women were enrolled from two public hospitals, four private hospitals, and a non-governmental women's center through a meticulous multi-stage sampling technique, employing semi-structured questionnaires. Socio-demographic variables were collected, and a 31-item questionnaire was used to assess the level of knowledge, attitudes, and practices toward cervical cancer. Data were analyzed using IBM SPSS version 26; p-values less than 0.05 were considered significant. **RESULTS**: The mean ages of respondents were 28.01 ± ((8.8357), 293 were single, while 107 were married. 69.67% had received at least tertiary education. 51.9% were employed, and the rest were unemployed. All 414 respondents were familiar with cervical cancer, but 65.7% lacked adequate knowledge of screening. Approximately 60% were aware of screening tests, with health workers as their primary information source. Most women displayed a favorable attitude toward screening; 97.3% expressed willingness if the procedure was explained and accessible, 96.4% if it was free and safe, and 97.6% supported screening for women under 30 years. Unfortunately, only 8% had undergone screening, with Pap smears as the commonest screening method for 84.8% of those who had received screening. Out of 381 respondents who had never been screened, 101 did not think they were at risk, 89 did not know where to get screened, 75 believed their religion protected them, and 37 found it expensive. In bivariate analysis, age, marital status, employment status, and knowledge of screening significantly correlated with good practice (p<0.05). **CONCLUSION**: The underutilization of screening services in an urban setting is concerning, signaling the potential for cancer care disparities in rural areas. Urgent interventions are needed to foster more favorable attitudes and practices, particularly in developing countries like Nigeria, where cervical cancer remains a leading women's health concern. With Nigeria's limited healthcare financing and fragile health system, cervical cancer screening promotion is crucial. Community-based strategies should be utilized to promote screening, and medical outreaches organized to eliminate healthcare barriers. The government should increase funding for the health sector and provide more screening centers while empowering healthcare providers.

Figure. Showing Reasons for not Screening for Cervical Cancer.

Reasons for not screening for cervical cancer

Total number of unscreened: 383
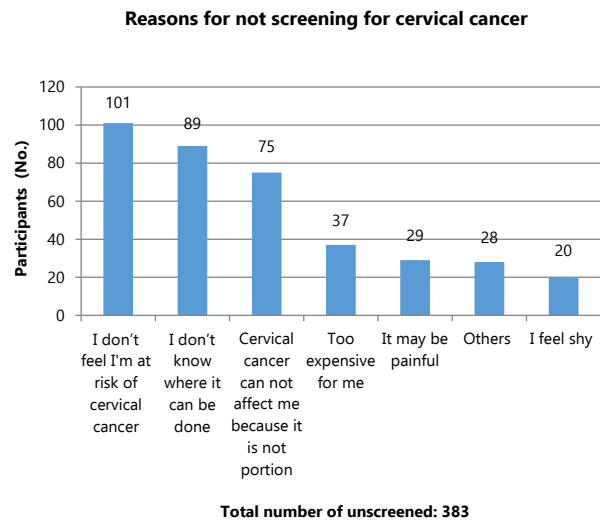
Key words: Females; Early Detection of Cancer; Uterine Cervical Neoplasm; Health Knowledge Attitude and Practice; Nigeria (Source: MeSH-NLM).

43. **MANAGEMENT OF COVID-19 IN A SICKLE CELL ANAEMIA PATIENT: A CASE REPORT**

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[1] Six-year Medical Student. Faculty of Medicine, University of Khartoum, Sudan

BACKGROUND: COVID-19 has had a significant impact on global healthcare systems, causing severe cases with acute respiratory distress syndrome, multi-organ failure, and death. Survivors of the virus may also experience long-term health problems. Sickle cell disease (SCD), an inherited red blood cell disorder, is characterized by chronic hemolytic anemia, vascular occlusion, and organ deterioration. SCD primarily affects African Americans, and common symptoms include acute and chronic pain, as well as severe conditions like acute chest syndrome and stroke. **METHODS**: We present the case of a 19-year-old female with sickle cell anemia who presented with symptoms of illness, jaundice, and no fever after receiving intravenous paracetamol. They were stable overall, with a Glasgow Coma Scale (GCS) score of 15/15 and no abnormal chest sounds. The patient had red, soft stools for two days and reduced bowel movements. Bowel sounds were normal, and they had sufficient urine output but experienced lower limb edema without joint swelling. Blood pressure was 107/62 mm Hg, mean arterial pressure was 72 mm Hg, pulse rate was 104 beats per minute, respiratory rate was 21 breaths per minute, and random blood glucose level was 102.5 mg/dL. The patient tested positive for COVID-19 via Polymerase Chain Reaction (PCR) testing. Laboratory results revealed low hemoglobin (6.8 g/dL), red blood cell count (2.16 x 10^6/micL), and high white blood cell count (22.4 x 10^3/micL) with 75.4% neutrophils. Hematocrit was 18.5%, mean corpuscular volume (MCV) was 85.7 pictogram/cell, mean corpuscular hemoglobin (MCH) was 31.4, mean corpuscular hemoglobin concentration (MCHC) was 36.7 g/dL, and platelet count was 215/micL. Other laboratory findings included urea (8 mg/dL), total protein (6.8 g/L), total bilirubin (2.15 mg/dL), direct bilirubin (0.98 mg/dL), aspartate aminotransferase (AST) (107 IU/L), alanine aminotransferase (ALT) (30 IU/L), alkaline phosphatase (ALP) (178 IU/L), and C-reactive protein (CRP) (48 mg/L). The patient's management plan involved intravenous dextrose and sodium chloride infusion, ceftriaxone (Samixon®), warfarin as needed, paracetamol as needed, folic acid once daily, vitamin C and zinc supplementation, levofloxacin once daily, Enema (Enemax) as needed, Pantoprazole (pantodac) (40 mg), nebulized hypertonic saline solution three times daily, diclofenac sodium (vortex) (75 mg) twice daily, and rivaroxaban (15 mg) twice daily. The patient received two blood transfusions during their hospital stay, with the first occurring on the first day of admission. **CONCLUSION**: Sickle cell anemia patients are at a higher risk of severe COVID-19 infection and associated complications. Early detection and treatment of complications are crucial. Blood transfusion, particularly red blood cell exchange transfusion, may be beneficial in managing these patients, reducing respiratory distress and the need for intensive care. However, more research is needed to establish optimal management strategies. This case report provides valuable insights into the presentation and management of sickle cell anemia patients with COVID-19. Clinicians should consider the examination findings and laboratory investigations for diagnosis and management. Limitations of this report include the lack of baseline information and long-term follow-up data, emphasizing the need for further research to generalize the findings.

Abstracts

44. **ATTITUDE, AWARENESS, AND UNDERSTANDING OF ARTIFICIAL INTELLIGENCE AI AMONG MEDICAL AND DENTAL STUDENTS IN JORDAN: A CROSS-SECTIONAL STUDY**

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[5] Fourth year, Faculty of Medicine, Xavier university, Aruba, Cincinnati, Ohio.

BACKGROUND: The rapid growth of AI has transformed various sectors, including healthcare. AI aids medical diagnoses and treatment planning, but challenges such as privacy and ethical concerns exist. Understanding AI is crucial for medical and dental students in Jordan to enhance patient care. This study examines students' attitudes, awareness, and understanding of AI to inform effective education and better healthcare practices. **METHODS**: A cross-sectional study was conducted in Jordan among medical and dental students from Nov 2022 to Mar 2023. Data were analyzed using descriptive statistics, Mann-Whitney U test, Kruskal-Wallis tests, and Spearman's correlation. Ethical approval was obtained, and SPSS was used for analysis. **RESULTS**: The study involved 800 respondents, predominantly female (54.6%) and with an average age of 19.81 years. Most participants were medical students (64.6%), had a national diploma (75.0%), and were in their first or second year of education (73.1%). The majority were single (97.9%), and 75.1% resided in the central region. In terms of technology background, 38.8% had family members in the technology sector, and half used electronic devices for 3-6 hours daily. Over 75% used electronic devices for studying, while 44.1% had taken technology courses, with only 23.5% having specifically studied Artificial Intelligence (AI). Additionally, 46.0% had prior research experience, but only 18.0% had participated in AI-related research. Participants rated their overall technology knowledge at 2.91 ± 1.06 and AI knowledge at 2.43 ± 1.21. The main sources of AI information were social media (35.0%). Regarding AI applications, 28.0% believed it would enhance medical diagnosis, while 24.0% expressed concerns about hacking and cybersecurity. Only 10.0% planned to consistently incorporate AI into their future medical practice. Statistical tests revealed significant differences in awareness of AI based on study field (p-value = 0.034), income (p-value = 0.028), previous technology involvement (p-value = 0.004), ICDL course participation (p-value = 0.02), AI course participation (p-value < 0.001), and programming language learning (p-value = 0.001). Similar variations were observed in understanding AI basic principles, with additional significance related to research course participation (p-value < 0.001). Attitudes toward AI differed only among those with previous technology course involvement (p-value = 0.037). Spearman's correlation indicated a moderate positive association between awareness of AI in medicine and dentistry and understanding of AI basic principles (r: 0.491, p < 0.001). **CONCLUSION**: The younger generation of medical and dental professionals' views AI as a collaborator in their practice. Strong interest and active engagement in AI-related courses highlight the importance of integrating AI education into medical curricula for innovative healthcare practices.

45. **OUTCOMES AND COMPLICATIONS OF PERCUTANEOUS NEPHROLITHOTOMY (PCNL) AT AL-RIBAT UROLOGY CENTER (OMER SAWI HOSPITAL)**

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BACKGROUND: Percutaneous nephrolithotomy generally is safe, effective, and associated with a few but specific complications. However, the definition of complications of PCNL and their management still lacks consensus. PCNL is the first-line approach for large, multiple, and inferior calyx renal stones according to the European Association of Urology (EAU) guidelines. We aimed to evaluate the Technique, Outcome, and Complication of percutaneous Nephrolithotomy at Al-ribat Urology Center (Omer Sawi Hospital). **METHODS**: A prospective, institutional-based cross-sectional study was used to investigated all patients presented to the study area with renal stones during the period from November 2019 to January 2020 in Al-Rebat Hospital. . A total of 28 patients were enrolled using multi-stage sampling. The researcher completed a validated questionnaire consisting of several sections to assess outcomes and complications of percutaneous nephrolithotomy. **RESULTS**: the study assessed the outcome of PCNL among 28 patients. The study found that the mean size of stones recorded was 1.25 cm, and the stones were on the left and right kidneys in 53.6%, and 46.4% respectively. Stones present by a percentage of 10.7%,28.6%, and 53.6% in the upper and lower calyx and pelvis respectively. The stones were rounded in 78.6% and staghorn in 21.4%. the stone was single in 53.6% and multiple in 46.4%. all operations were done under fluoroscopy guidance. Patients were supine in 25% and prone in 75% of the operations. The mean operative time was 27.9 minutes calculated from puncture time does not include retrograde and positioning. In addition to that 57.1% of the patients had nephrostomy tubes and double J. 92.9% of the patients were stones-free at the end of the operation. Injury to the surrounding organs did not occur. Mild bleeding occurs in 10.7% of the patients, in which blood transfusion was necessary. Extravasation of fluid occurs in 10.7%. Fever occurs in 42.9%. Most of the patients stay for 1 day postoperatively 57.1%.**CONCLUSION**: This study demonstrated that PCNL is a safe elective, minimally invasive surgical modality with good outcomes and lower incidences of major complications.

Abstracts

46. **BRIDGING HEALTHCARE DISPARITIES FOR LGBTQ+ COMMUNITY: A ZONAL STUDY ON MEDICAL STUDENTS' ATTITUDES AND KNOWLEDGE IN INDIA**

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BACKGROUND: The LGBTQ+ community has long endured discrimination worldwide. This marginalized group faces significant health disparities resulting from a lack of inclusion in medical curricula, inadequate training of healthcare professionals, and negative attitudes towards their unique health needs. Such factors may contribute to a hesitancy among medical students to provide appropriate care for LGBTQ+ patients. Understanding the regional nuances can further help guide the development of region-specific educational and sensitization programs for healthcare professionals. Thus, this study seeks to assess attitudes and knowledge of medical students and interns towards the LGBTQ+ community in different zones of India (North, South, and West), and understand the variations across regions, and determine any associated demographic factors influencing the same. **METHODS**: Respondents were invited to participate in this cross-sectional observational study between June and November 2020 through social media platforms. They were requested to complete a self-administered questionnaire distributed via Google Forms, which was divided into three sections: the first collected demographic data, the second comprised 10 true or false knowledge-based questions, and the third contained an additional set of 10 questions using a 5-point Likert scale to assess participants' attitudes. Associations between attitudes, knowledge, and demographic characteristics were assessed using Chi-square tests ($p < 0.05$). **RESULTS**: A total of 862 responses from three zones - North, South, and West - were included in the study. Responses from the East zone were excluded due to the limited number. Among the respondents, 65.4% exhibited an overall positive attitude towards the LGBTQ+ community. Attitudes and demographics showed a statistically significant association, indicating that respondents under the age of 20, female, and medical students were more likely to hold positive attitudes across all three zones. Regarding knowledge, 56.1% of the participants demonstrated overall satisfactory knowledge levels. Knowledge and demographics were found to have a significant association, specifically concerning age and profession, but not gender. However, the zonal analysis revealed that the significant association between knowledge and demographics was only present in the South zone, while the North and West zones did not show significant associations. These findings suggest that factors other than age and profession may be influencing knowledge levels in the North and West zones. **CONCLUSION**: The present study provides valuable insights into the attitudes and knowledge of medical students and interns towards the LGBTQ+ community in different zones of India - North, South, and West. Despite certain limitations, such as a lower participation rate among interns and the absence of exploring religious affiliations, the findings show a significant proportion of positive attitudes and satisfactory knowledge towards the LGBTQ+ community, reflecting a growing acceptance and empathy among future healthcare professionals. However, the pronounced zonal differences in the responses must be acknowledged, and highlights the importance of region-specific interventions and targeted educational initiatives to enhance knowledge levels in the North and West zones. It is crucial to update the medical curriculum to incorporate comprehensive LGBTQ+ education and provide training and sensitization that ensures optimum care for individuals regardless of their sexual orientation and gender identity.

47.   **FACEBOOK USE AND MENTAL HEALTH: GENDER AND ACADEMIC YEAR VARIATIONS IN SYMPTOMS**

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BACKGROUND: In an increasingly digital age, social media, particularly Facebook, has become an integral part of college students' lives. This study seeks to explore how gender and academic year may influence Facebook addiction and its impact on mental health among this demographic. **METHODS**: A cross-sectional study was conducted. The survey includes sociodemographic questions and BFAS, GAD-7, and BFAS scales. Data analysis was conducted by SPSS, with statistical tests conducted at a 95% confidence level. Normal distribution was tested with Kolmogorov-Smirnov test. Sperman's correlation was conducted to assess any potential correlation and the Mann-Whitney test was used to investigate any significant differences in the mean score. **RESULTS**: This study included 1,098 college students aged 18 to 25 (mean age 21.35). A majority (62.8%) of the participants identified as female, and notably, 61.5% were clinical medical students. The Bergen Facebook Addiction Scale (BFAS) was utilized yielding a mean score of (mean: 16.43, SD: 5.934).. Interestingly, most participants reported "Rarely" or "Very Rarely" feeling restless or troubled when unable to use Facebook (64.5%). The Generalized Anxiety Disorder Questionnaire (GAD-7) unveiled that participant experienced mild anxiety, with a mean score of 8.63 (SD: 4.928). Approximately 43.2% reported mild anxiety. Depression, assessed using the Patient Health Questionnaire-9 (PHQ-9), reflected moderate depression with a mean score of 11.70 (SD: 6.39). Correlations were explored among BFAS, GAD-7, and PHQ-9 scores. A strong positive correlation emerged between GAD-7 and PHQ-9 (r: 0.634, p-value < 0.001). Furthermore, there was a significantly moderate positive correlation between BFAS and PHQ-9 (r: 0.344, p-value < 0.001) and a significantly small positive correlation between BFAS and GAD-7 (r: 0.282, p-value < 0.001). The Mann-Whitney Test was employed to investigate gender and academic year differences in scores. Female participants exhibited significantly higher scores than males in BFAS (p-value = 0.028), GAD-7 (p-value < 0.001), and PHQ-9 (p-value = 0.004). Additionally, preclinical students reported higher scores than clinical students in BFAS (p-value < 0.001) and PHQ-9 (p-value < 0.001). **CONCLUSION**: In summary, this study sheds light on the complex interplay between Facebook use, mental health symptoms, gender, and academic year among college students. It reveals a moderate level of Facebook addiction and varying degrees of anxiety and depression. Gender disparities are evident, with females reporting more severe symptoms. Furthermore, academic year impacts these factors, with preclinical students exhibiting higher scores. Understanding these dynamics is crucial for tailoring interventions and support mechanisms to address the unique challenges faced by college students in the digital age.

Key words: GAD-7. PHQ-9; BFAS, Medical Students (Source: MeSH-NLM).

Abstracts

48. **ANTIBIOTIC USE AWARENESS AND PRACTICES IN THE INDIAN COMMUNITY DURING LATER STAGES OF COVID-19 PANDEMIC: A CROSS-SECTIONAL SURVEY**

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BACKGROUND: Irrational prescription of, and self medication with antibiotics is a rampant problem in LMIC'S like India. The prescription of antibiotics for symptoms similar to Covid-19 infection has aggravated the problem of antibiotic overuse, further worsening antimicrobial resistance. This study aims at understanding not only the extent of overuse, but also the social patterns and causes of overprescription or self medication of antibiotics in India. **METHODS**: A cross-sectional survey of the knowledge, attitude and practices on antibiotic use was conducted from September to October, 2022, using a Google form questionnaire. A virtual snowball technique was used to recruit respondents. **RESULTS**: A total of 309 responses were received (56% female and 44% male). 59.5% of the respondents were between 15 to 30 years. Surprisingly, inspite of a majority of respondents (around 70%) having a health sciences background, 67.8% of respondents falsely believe that antibiotics speed up recovery from most coughs and colds. 94.8% of respondents had used antibiotics in the last one year.17.2% of respondents had taken antibiotics without the prescription of a doctor. The most common antibiotic used on prescription and self medication was Azithromycin. Only 20.7% of respondents took antibiotics on suspicion of having Covid-19, with the most common one being Azithromycin. **CONCLUSION**: The study brings to light trends in the awareness and usage of antibiotics with greater emphasis on the Indian medical community. The findings of this study can be used to formulate a more effective Antimicrobial Stewardship Programs to curb antibiotic overuse. The use of antibiotics for self-limiting indications like cough, cold and sore throat needs to be restricted through stricter regulations. The study highlights that a greater knowledge on antibiotic use does not necessitate better attitude towards their cautious and rational use, nor does it guarantee a supportive attitude towards regulations on antibiotic dispensing. In spite of it's significant cardiovascular adverse drug reactions, Azithromycin was found to be the most commonly used antibiotic in our study. Relatively lower rate of self-medication with antibiotics was seen in our study, which might be due to a greater percentage of respondents with a healthcare background, thus exhibiting positive behavior practices on antibiotic use.

Table. Attitude of Respondents regarding Antibiotic Use.

S.No.	Attribute	Frequency (%)
1.	I always complete the course of treatment even if I feel better.	
	Agree	233 (75.4%)
	Disagree	76 (24.6%)
2.	It is good to be able to get antibiotics from relatives or friends without having to see a doctor.	
	Agree	269 (87.1%)
	Disagree	40 (12.9%)
3.	I prefer to use antibiotics when I have a sore throat/cough for more than a week.	
	Agree	193 (62.5%)
	Disagree	116 (37.5%)
4.	Did you take antibiotics on suspicion of COVID-19?	
	Yes	64 (20.7%)
	No	245 (79.3%)
5.	Were you prescribed antibiotics by your doctor after testing positive for COVID-19?	
	Yes	64 (20.7%)
	No	93 (30.1%)
	N/A	152 (49.2%)

49. **PANCREATICOPLEURAL FISTULA: NAVIGATING THE ENIGMA OF AN ELUSIVE DIAGNOSIS**

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BACKGROUND: Pancreaticopleural Fistula is a Rare Complication of Acute and Chronic Pancreatitis. This Usually Presents With Chest Symptoms Due to Pleural Effusion, Pleural Pseudocyst, or Mediastinal Pseudocyst. Diagnosis Requires a High Index of Clinical Suspicion in Patients Who Develop Alcohol-induced Pancreatitis and Present With Pleural Effusion Which is Recurrent or Persistent. Analysis of Pleural Fluid for Raised Amylase Will Confirm the Diagnosis and Investigations Like Ct. The Rarity of Pancreaticopleural Fistulas, Especially Without the Context of Chronic Pancreatitis, Makes This Case Noteworthy. The Presence of Pleural Effusion in the Absence of Lung Disease Prompted Thorough Investigation, Leading to the Identification of an Unusual Etiology. **THE CASE**: A 35-year-old Alcoholic Male Presented to Emergency Room With 4-day History of Breathlessness Which Was Sudden Onset, Gradually Progressing to Grade-3 Dyspnea on NYHA Scale, Associated With Dry Cough. Hospitalization and Chest Radiograph1 Revealed Gross Right Side Pleural Effusion. Emergency thoracentesis and Intercostal Drainage Tube Placement were done and Patient Was Referred to Pulmonology Department. On further Evaluation, Patient Also Complained of Mild Persistent Left Upper Quadrant Abdominal Pain for More Than 6 Months Which Was Relieved on Medication Hence, Ignoring the Complaint. Thoracentesis Procedure Yielded 1.5l Amylase-rich Fluid in the Pleural Space. The Patient Was Then Referred to Surgical Department for Further Evaluation. Usg Abdomen Was Inconclusive. Lab Reports Revealed Mildly Elevated Pancreatic Enzymes. contrast-Enhanced Computed Tomography (Ct) Scan of the Abdomen and Chest Revealed a Dilated Main Pancreatic Duct and Multiple Direct Communication Between the Pancreatic Duct(see Figures 1) and the Right Pleural Space, Leading to the Formation of Massive Pleural Effusion and Complete Collapse of Right Lung. Rest of the Pancreas Appeared Normal With No Evidence of Calcification. After a Thorough Clinical Evaluation, Laboratory Investigations, and Imaging Studies, the Patient Was Diagnosed With a Pancreaticopleural Fistula. The Patient Was Managed Through a Multidisciplinary Approach Involving Gastroenterology, radiology, and General Surgery Teams. Initial Management Included Aggressive Medical Treatment With Bowel Rest, Total Parenteral Nutrition, Antibiotics and Administration of Proton Pump Inhibitors. The Patient Showed Gradual Improvement Post-drainage, With a Significant Decrease in Pleural Effusion Volume and Resolution of Dyspnea. Follow-up With CT scan Was Advised. The patient Was Subsequently Monitored Continuously With Dietary Recommendations. **CONCLUSION**: the Chosen Case is Significant Due to Its Diagnostic Intricacies and the Necessity for Collaboration Among Various Medical Specialties. The Management of Pancreaticopleural Fistulas Requires a Tailored Approach. This Case Underscores the Importance of Early Diagnosis, Meticulous Evaluation, and Timely Intervention in Achieving Successful Outcomes for Patients. In conclusion,by Sharing This Case, I Aim to Contribute to the Understanding of This Rare Condition and Emphasize the Significance of Timely Diagnosis and Appropriate Management Strategies.

Figure. CT Scan of Patient Revealing Multiple Pancreaticopleural Fistula.
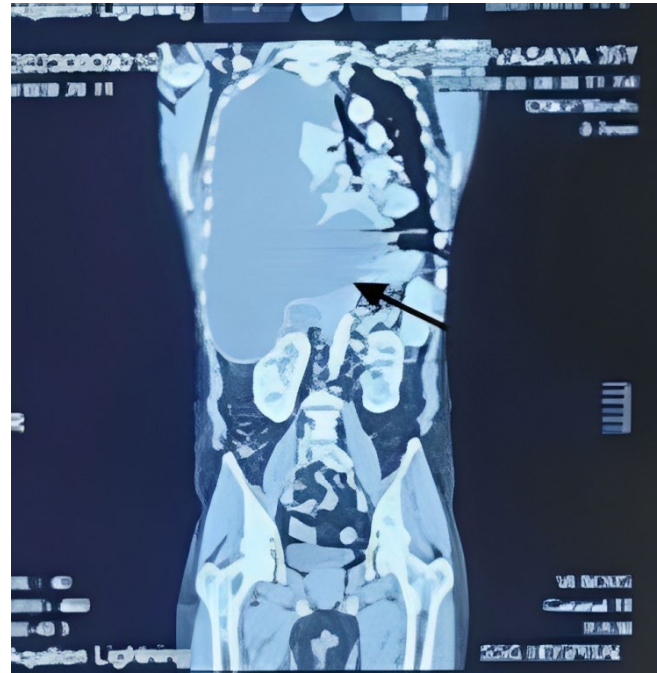
Key words: Fistula; Pancreaticopleural; Management; Medical; Fistula [Mesh]; Fistula/Diagnosis [Mesh] (Source: MeSH-NLM).

Abstracts

50. **A CROSS SECTIONAL STUDY ON VARIOUS MENSTRUAL HYGIENE PRODUCTS USED AMONG COLLEGE GOING STUDENTS OF CENTRAL GUJARAT, INDIA**

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BACKGROUND: In recent years, there has been significant progress in raising awareness about menstruation in Indian society, primarily through educational initiatives and various communication channels. However, one critical aspect that often remains overlooked is menstrual hygiene products. This study aims to bridge this knowledge gap by conducting a quantitative assessment of students' preferences, their level of knowledge, reliability ratings, and acceptability of various menstrual hygiene products. Additionally, the secondary objective is to identify the common challenges and discomforts frequently experienced by women when using these hygiene products. **METHODS**: This study takes on a descriptive approach, primarily focusing on assessing the knowledge, attitudes, and practices related to menstrual hygiene products among young females. Data for this study was collected through online questionnaires and meticulously organized in Excel sheets for comprehensive analysis. **RESULTS**: Our research involved 186 medical students, the majority of whom displayed a good understanding of menstrual hygiene products and their usage. It is noteworthy that 75% of the students reported facing issues while using these products. However, these challenges did not significantly disrupt their daily activities, indicating their resilience and adaptability in managing these difficulties. **CONCLUSION**: Disposable pads emerged as the favored menstrual hygiene product among the participants due to their convenience, hygiene, comfort, and high absorption capacity. Nevertheless, it is crucial to acknowledge that users of disposable pads often encounter issues such as skin irritation, leakage, unpleasant odors, and a potential risk of infection. This underscores the need for continuous efforts to improve product design and education surrounding menstrual hygiene to ensure the well-being and comfort of women.

Key words: Menstrual Hygiene; Menstrual Hygiene Products; Women's Health (Source: MeSH-NLM).

51. **CROSS SECTIONAL STUDY TO CORRELATE THE STATURE AND PERCUTANEOUS LENGTH OF ULNA BONE OF PEDIATRICS AGE GROUP IN NORTH KARNATAKA STATE OF INDIA**

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BACKGROUND: Estimating stature is important for clinical, anthropological, forensic as well as medico-legal standpoint. In clinical scenarios, its significances range from estimating the BMI (body mass index) to diagnosing certain physical growth disorders and assessment of nutritional status. Height is one of the key parameters in multiple vital decision-making setting, such as: body surface area, drug dosage calculations, glomerular filtration and prediction of pulmonary function. Moreover, lack of cooperation from patient in pediatric is much common which may delay the classical method of stature estimation. Above all, height measurement is restricted to ambulatory patients only. But measurement of ulna bone overcomes all these shortcomings. The long bone, ulna is mostly subcutaneous throughout its length and easily approachable for measurement makes it the most preferable to be selected for the study. **AIM**: To calculate age wise stature variations among pediatric groups, to estimate percutaneous length of ulna bone, to establish a relationship between stature and percutaneous length of ulna bone, and to formulate predictive equations for calculating stature with ulnar length, respectively for each of the genders. **METHODS**: The study was conducted at the pediatric ward of a medical college in North Karnataka from August 1,2022 to December 31, 2022. Sample size for proportion was calculated to be 96, taking 33% as P (Pilot study) and at 5% absolute precision at 95% confidence level. All steps and precautions were followed appropriately as per guidelines published by World Health Organization. Length of ulna bone was measured using a measuring tape (0-152cm/60 inches) with rounded ends, from the tip of the olecranon process to the tip of the styloid process of ulna keeping elbow joint flexed and palm spread over opposite shoulder. Measurements of length of both the right and left ulna were taken separately for calculation. Both the stature and the length of ulna were measured in centimeters. Means of age, length of ulna and body height/length were analyzed amongst both the genders for each age group. Data analysis would be done using Statistical Package for the Social Sciences; SPSS version 23; $p \leq 0.05$ would be considered statistically significant. **RESULTS**: In the study, relationship between stature and percutaneous length of ulna bone were analyzed and predictive equations for calculating stature with ulnar length, respectively for each of the genders were formulated as: For males, length or height = 6.545455 × (mean ulnar length of both the arms) ±0.3cm. For females, length or height = 6.540540 × (mean ulnar length of both the arms) ±0.3cm. **CONCLUSION**: The study suggests that there is a linear correlation between stature and ulna bone length in pediatric age groups. The derived equation can be used to estimate the stature of pediatric age group, specific to the gender. Similarly, length of ulna bone may be estimated if the stature is known. It will contribute greatly towards anthropometry and its widespread applications in clinics and forensics.

Table. Comparison Between Actual Length/Height and Estimated Length/Height.

Age in years	Male				Female			
	Mean ulnar length (cm)	Estimated mean length/ height in cm (x1)	Actual mean length/ height in cm (y1)	Difference in cm (x1-y1)	Mean ulnar length (cm)	Estimated mean length/ height in cm (x2)	Actual mean length/ height in cm (y2)	Difference in cm (x2-y2)
1	11.6	75.9	76	-0.1	11.5	75.2	75	+0.2
2	13.3	87.1	87	+0.1	13.3	87.0	87	0
3	14.6	95.6	96	-0.4	14.5	94.8	95	-0.2
4	15.7	102.8	103	-0.2	15.4	100.7	101	-0.3
5	16.6	108.7	109	-0.3	16.4	107.3	107	+0.3
6	17.6	115.2	115	+0.2	17.4	113.8	114	-0.2
7	18.5	121.1	121	+0.1	18.3	119.7	120	-0.3
8	19.4	127.0	127	0	19.1	124.9	125	-0.1
9	20.2	132.2	132	+0.2	20.2	132.1	132	+0.1
10	21.1	138.1	138	+0.1	21.0	137.3	137	+0.3
11	21.8	142.7	143	-0.3	21.9	143.2	143	+0.2
12	22.8	149.2	149	+0.2	22.5	147.2	147	+0.2

Key words: Pediatrics; Anthropometry; Ulna Bone (Source: MeSH-NLM).

Abstracts

52.   LUDWIG'S ANGINA, CLINICAL CHALLENGE IN PEDIATRICS. – A CASE REPORT

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BACKGROUND: Ludwig's angina is a rapidly progressing cellulitis that occurs in the sublingual, submandibular, and submental spaces, with a high mortality rate due to its potential to obstruct the airway. Its primary cause is odontogenic, with polymicrobial infection being the most common scenario. The occurrence of this condition is less common in the pediatric population, but children are more susceptible to life-threatening complications. **THE CASE**: A two-year-old male preschooler, with no significant medical history, presented with a clinical picture evolving over six days. This was characterized by recurrent fever spikes (up to a maximum of 38.7 degrees Celsius) and a growing, stony, painful mass in the right cervical region measuring 5cm x 5cm. The patient had not shown improvement despite self-medication with amoxicillin at home. Upon admission to a regional hospital, a fixed, painful, stony mass was found in the right submandibular region. Blood tests revealed leukocytosis with a left shift, positive acute-phase reactants, and a neck ultrasound indicating upper cervical adenitis without abscess formation. Antibiotic treatment was initiated for six days. However, the fever persisted, and there was an increase in the size of the lesion, along with the formation of an abscess and limited neck rotation. Consequently, on the 12th day of illness, the patient was referred to a tertiary-level hospital where a large, fixed, stony lesion was observed in neck regions II and III, with no exclusion of a neoplastic process. The patient also experienced difficulty swallowing, necessitating a liquid diet. It was decided to perform drainage under sedation and a biopsy, which revealed a stony mass in the right neck region II extending into the submental space and midline. There were severe inflammatory changes in the subcutaneous tissue, necrotic lymph nodes, but no abscess was found. Pathological examination showed inflammatory infiltrate, recent hemorrhage and vascular congestion, with the initial suspicion being an infectious process. Flow cytometry of the cervical lymph node showed no alterations in the lymphoid series but an elevation of neutrophils. However, due to the characteristics and location of the lesion, a consultation with pediatric hematologic-oncology was sought, and they considered a low likelihood of malignancy. A tuberculin test was requested and returned negative results. A culture of the lesion also yielded negative results. During hospitalization, the condition was considered Ludwig's angina, and the patient continued to show a progressive reduction in temperature and adenitis. On the 21st day, the patient exhibited a reduction of approximately 90% in the size of the lesion, leading to the discontinuation of antibiotic treatment and subsequent medical discharge. **CONCLUSION**: Ludwig's angina is an infection that primarily affects the floor of the mouth, progressing rapidly and potentially compromising the patient's airways, thus warranting a medical emergency status. It is uncommon and can be mistaken for neoplastic diseases or other infections, highlighting the need for knowledge about this condition and a high degree of suspicion due to its potentially life-threatening consequences. The goal is to establish appropriate management through a multidisciplinary team, given the complexity of its manifestations.

Table. Attitude of Respondents regarding Antibiotic Use.

Laboratory test	Hospitalization days	Pacient	Reference range
C-reactive protein	Day 1	99.80 mg/l	0-5 mg/l
Lactate dehydrogenase (LDH)	Day 1	248.00 UI/L	
Sodium	Day 1	138.00 mmol/L	135-148 mmol/L
Potassium	Day 1	4.57mmol/L	3,5-4,5 mmol/L
Ultrasound of the neck	Day 3	Abscessed adenitis, in the right submandibular region, a hypoechoic image with irregular margins partially measurable by its morphology, however with approximate diameters of 35 x 14 x 32 mm with an approximate volume of 8 cc associated with a diffuse increase in the echogenicity of the adjacent soft tissues. Conclusion: Lesion towards the right submandibular region associated with inflammatory changes in the adjacent soft tissues may be related to adenitis with partially abscess.	
Drainage Culture	Day 4	Negative	
Flow Cytometry	Day 5	Lymph node: lymphoid cell line without alteration. High representation of neutrophils. The findings were correlated with soft tissue infectious process involving lymphoid nodal tissue.	
Purified protein derivative standard; TB skin test (PPD)	Day 7	Negative	
Lymphocytes	Day 9	54.2%	25-50 %
Absolute Lymphocyte Count	Day 9	6.04 ml/mm3	
Hemoglobin	Day 9	12.2 g/dl	13-18 g/dl
Hematocrit	Day 9	36.4%	42-52 %
Platelets	Day 9	493x 10^3/ul	150-450 x10^3/ul

53. **RECTUS SHEATH HEMATOMA FOLLOWING SUBCUTANEOUS ENOXAPARIN APPLICATION: A CASE REPORT**

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BACKGROUND: Thromboprophylaxis for prevention of venous thromboembolism has significantly decreased morbidity and mortality for post-operative patients over the previous decades. However, patients on anticoagulants are at risk for several major bleeding events, such as rectus sheath hematoma. Rectus sheath hematoma is an uncommon, potentially life-threatening complication that can be difficult to diagnose and easily confused with other abdominal pathologies. It most commonly occurs in patients on current prophylactic or therapeutic anticoagulants and can be spontaneous or provoked. Inadvertent damage to the rectus abdominis muscle or epigastric arteries during subcutaneous enoxaparin injection in the abdomen has been identified as a rare cause of this complication. **THE CASE**: A 68-year-old hospitalized female presented acute abdominal pain in the right lumbar and iliac region accompanied by hypotension and tachycardia eight days after uncomplicated total knee arthroplasty. She was found to have severe anemia on laboratory exam and a right rectus sheath hematoma on abdominal CT scan with a volume of 300cc. After the patient was stabilized via fluid resuscitation and blood transfusion, the hematoma was surgically drained. The surgeons involved noted possible inadvertent puncture of the right inferior epigastric artery during one of the patient's bi-daily subcutaneous enoxaparin injections. **CONCLUSION**: This case report emphasizes the importance of recognizing rectus sheath hematoma as a potential complication of subcutaneous enoxaparin injection and the knowledge of its risk-factors and clinical presentation to make an early diagnosis and give adequate treatment.

Figure. Coronal CT Scan of the Abdomen Following Acute-Onset Abdominal Pain.
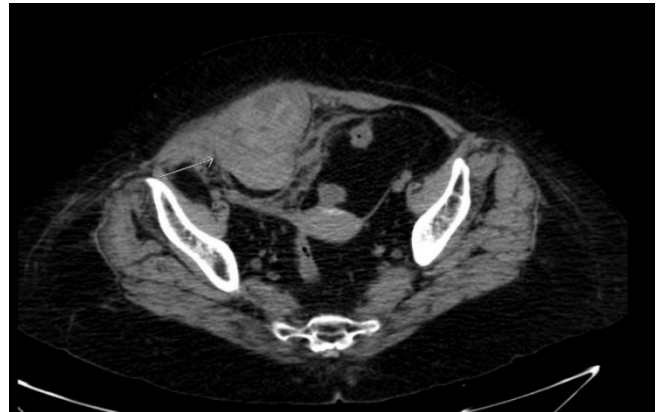
Legend: Arrow shows a large (73 x 67 x 112 mm), well-defined cystic mass of approximately 300mL of volume occupying the right, infra-umbilical, anterior abdominal wall confined to the rectus sheath without extension across the midline. The intralesional density is diffusely increased with some hypoechoic foci.

Key words: Rectus Abdominis; Hematoma; Enoxaparin; Case Report; Anticoagulants (Source: MeSH-NLM).

Abstracts

54. **MAN VERSUS MACHINE: CAN ARTIFICIAL INTELLIGENCE DISTINGUISH BETWEEN THE QUALITY OF ONLINE HEALTH INFORMATION ON SOCIAL MEDIA?**

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BACKGROUND: ChatGPT is a popular artificial intelligence service offered by OpenAI. It's utility in assessing quality of online medical information has been investigated by Golan and Ripps et. al. In July 2023, ultimately concluding that ChatGPT was unable to discern poor from high quality information. However, this study focused on information from websites generated from a Google search. To the author's knowledge, there has been no evaluation of the ability of ChatGPT to stratify the quality of online medical information from social media videos. Two previous studies, by Dhami and Wescott et. al. In May 2023 and Rehman et. al. In 2021, identified differences via manual calculation of DISCERN scores between physician and non-physician Tik-Tok videos on the topic of hidradenitis suppurativa. This study aims to identify whether ChatGPT can distinguish between physician and non-physician health videos pertaining to hidradenitis suppurativa on Tik-Tok via DISCERN score. **METHODS**: A similar methodology to Dhami and Wescott et. al. was used in an attempt to capture the same population of videos. A new Tik-Tok account was created to eliminate any previous search bias. The term "#hidradenitissuppurativa" was searched in July, 2023. Videos were filtered by "most-liked." Inclusion criteria consisted of videos posted prior to October 25, 2022, that did not satisfy the exclusion criteria. Exclusion criteria consisted of videos in a language other than English, duplicated videos, videos that did not offer health advice, or videos deemed irrelevant to hidradenitis suppurativa by the author. Videos included were transcribed by the website TokScript (https://script.tokaudit.io) or by the author if transcripts were not available by that method. ChatGPT was prompted to evaluate transcripts based on the DISCERN criteria, which were copied directly from the Discern Instrument website "Rating this question" pop-up. Each of the 16 question criteria were submitted to ChatGPT separately. Transcriptions were provided to ChatGPT and a DISCERN score was generated. A Shapiro-Wilk test was performed on the sample of DISCERN scores to determine normality. A Mann-Whitney U test was performed between physician and non-physician DISCERN scores. **RESULTS**: Of 377 Tik Tok videos returned with the search, 43 satisfied inclusion criteria (11.4%). Of these, 19 (44.2%) were produced by a physician and 24 (55.8%) by a non-physician. Aggregate DISCERN scores were not normally distributed (Shapiro-Wilk $p < 0.0002$). Physician produced videos had a mean DISCERN score of 41.87 with an interquartile range of 26-57. Mean DISCERN score for non-physician produced videos was 24.56 with an interquartile range of 16-30.5. Mann-Whitney U test returned a $p < 0.0006$. **CONCLUSION**: This study suggests that ChatGPT may have the capacity to distinguish high from low quality social media videos to some extent based on the DISCERN score. More evaluation is necessary to elucidate the boundaries of utilizing ChatGPT in this fashion. This has the potential to suggest that polishing this utilization may automate this process in the future, saving valuable time for human researchers in this field.

Key words: Ai Artificial Intelligence; Consumer Health Information; Social Media (Source: MeSH-NLM).

55. RARE PRESENTATION OF MYOCARDIAL ISCHEMIA IN A PATIENT WITH AN ANOMALOUS RIGHT CORONARY ARTERY

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BACKGROUND: Coronary anomalies are coronary patterns that occur rarely in the general population. The most common type of these anomalies is the emergence of the right coronary artery (RCA) from the left coronary sinus, which in most patients is either asymptomatic or leads to sudden cardiac death (SCD). **THE CASE**: This case report presents the case of a 35-year-old male patient who had an inferior ST elevation myocardial infarction (STEMI) for which percutaneous coronary intervention was attempted and failed due to the patient going into cardiac arrest. The patient was subsequently managed medically in the cardiac intensive care unit and followed up outpatient with a cardiologist. The patient experienced symptoms of exertional angina and had a CT angiography of the heart and coronary vessels that identified an anomalous RCA emerging from the left coronary sinus. He was diagnosed with an anomalous RCA with malignant take-off from the left coronary sinus, and subsequent management was surgical with a coronary artery bypass graft (CABG) x1 using the right internal mammary artery (RIMA to RCA). Intraoperatively, the patient was found to have sclerosis of the RCA proximally for about 5cm. The patient did well post-operatively and had no symptoms of exertional angina upon outpatient follow up with both his cardiologist and cardiothoracic surgeon. **CONCLUSION**: Most cases of coronary anomalies have been found to be either completely asymptomatic or lead to SCD, especially in young patients, however very few cases in literature identified patients with this anomaly presenting with STEMI such as in this case. Another significant finding in this patient is sclerosis of the RCA, where although some articles propose that anomalous coronary arteries may be more susceptible to atherosclerosis, others conclude that there may be no association; concluding that factors such as intramural course, slit-like origin, and acute angle take-off might be more significantly associated. Moreover, patients with coronary anomalies rarely experience cardiac events solely due to their anomaly, such as with this patient. Finally, this patient's significantly young age at 35 years old is significant given the mean age of patients undergoing CABG being 60.8 years in one cross-sectional study. Current management of symptomatic patients with these anomalies is under debate, with many patients undergoing CABG such as in this case, although one study shows no significant difference in mortality or 10-year survival with surgical intervention despite having higher surgical intervention rates. Percutaneous coronary intervention (PCI) of patients with coronary anomalies has been shown to be difficult or unsuccessful in most studies, although a few cases in literature were successful with tools such as multidetector CT (MDCT). Awareness of these anomalies and their possible presentation, risk factors, and radiologic findings is important especially given their potential for SCD. More research is needed to further elucidate the best treatment options and perhaps even improve the potential for non-invasive interventional techniques such as PCI.

Figure. CT Angiogram of the Heart and Coronary Arteries Showing Emergence of the Left Coronary Artery (Red Arrow) and the Right Coronary Artery (Blue Arrow, Small Vessel) from the Left Coronary Sinus.
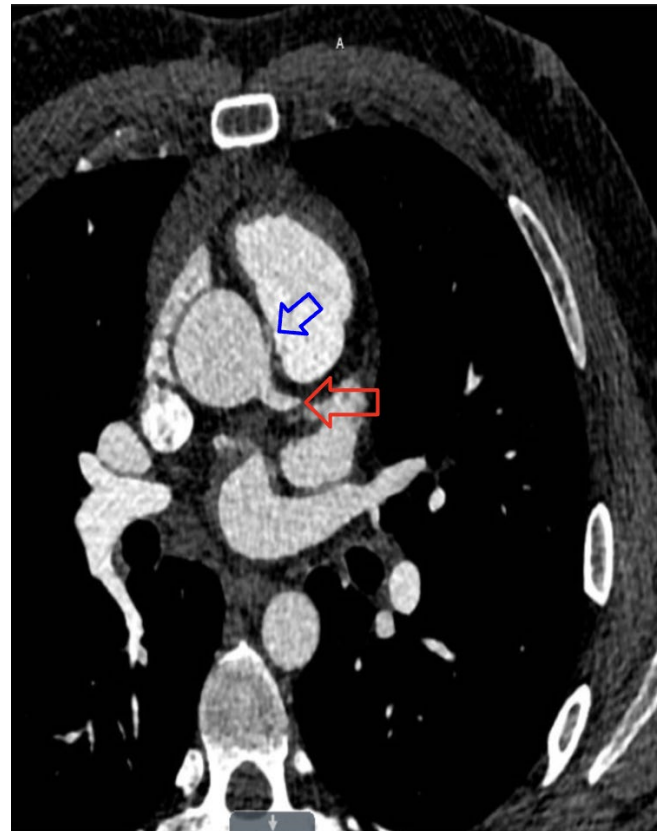
Key words: Coronary Vessel Anomalies; Myocardial Ischemia; Coronary Artery Bypass; Coronary Artery Disease (Source: MeSH-NLM).

Abstracts

56. **INCIDENTALLY FOUND RECTAL CARCINOID TUMOR IN A 46-YEAR-OLD FEMALE: THE POTENTIAL FOR COMPLICATIONS AND THE IMPORTANCE OF SCREENING GUIDELINES**

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BACKGROUND: Carcinoid tumors are rare neuroendocrine tumors that can be found in the gastrointestinal tract as well as other areas throughout the body. The neurosecretory nature of these tumors can have implications for other chronic diseases that patients may have, including diabetes and hypertension. Certain treatments that may be implemented for patients that have carcinoid tumors, such as somatostatin analogs and Everolimus, can also alter blood glucose control. This highlights the importance of diagnosing and treating carcinoid tumors as early as possible to avoid complications associated with metastasis and more intense treatment. With more advanced disease, clinicians should consider the possible effects of carcinoid tumors and their treatments on other chronic conditions as they manage the patient. For gastrointestinal carcinoid tumors, colonoscopy screening guidelines are incredibly important to counsel patients on, as resection can yield a complete cure for carcinoid tumors when they are found at an early stage. **THE CASE**: We describe the case of an incidentally diagnosed rectal carcinoid tumor in a 46-year-old female patient with a history of type 2 diabetes mellitus and hypertension. This tumor was discovered on colonoscopy, which had been delayed due to complications following a surgical procedure that the patient had recently undergone. **CONCLUSION**: Carcinoid tumors are quite rare, however, the incidence of neuroendocrine tumors, including gastrointestinal carcinoid tumors, is growing. Thus, it is important to consider the implications of such tumors on pre-existing chronic conditions, such as diabetes and hypertension. Also, more research efforts should be directed towards standardizing the treatment protocol for such tumors, specifically rectal carcinoid tumors, and counseling patients on the importance of screening guidelines. When rectal carcinoid tumors are caught early, complete surgical resection can be curative, which is ideal. However, with more advanced disease, symptoms of the tumor itself as well as necessary treatments can impact other chronic conditions, possibly requiring modifications to a patient's prior medication regimen. Fortunately, the carcinoid tumor in the described patient was not advanced enough to cause significant alteration in her other chronic conditions, however, this case is still a great example of how carcinoid tumors can arise asymptomatically, which is why it is important for the astute clinician to counsel on screening recommendations. This emphasizes the importance of using a team-based approach to ensure that the carcinoid tumor is diagnosed and adequately treated without significantly affecting other conditions so that patients can achieve optimal outcomes for each condition being managed. It also highlights the crucial importance of screening guidelines so that conditions can be caught early to mitigate downstream consequences.

Figure. Photomicrograph Showing Polygonal Shaped Cells with Salt and Pepper Chromatin, Inconspicuous Nucleoli, Moderate Eosinophilic Cytoplasm, Rare Mitotic Figures, and no Necrosis (H&E, 400X).
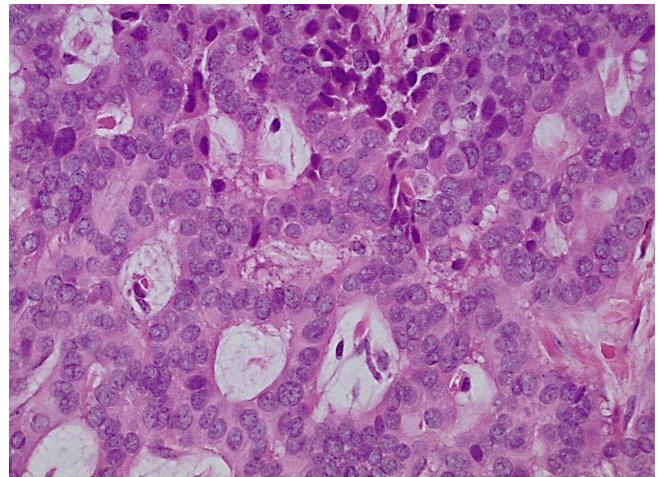
Key words: Carcinoid Tumor; Hypertension; Diabetes Mellitus; Type 2; Colonoscopy; Early Detection of Cancer (Source: MeSH-NLM).

57. **AWARENESS, COVERAGE, AND BARRIERS TO COVID-19 VACCINATION AMONG UNDERGRADUATE STUDENTS IN NIGERIA**

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Figure. Association Between Coverage and Awareness (Knowledge Grading) of COVID-19 and COVID-19 Vaccines.

P value
x^2 = 28.189
N = 326
P = 0.000
Remark: Significant

Legend: Bar Chart reflecting the associations between vaccine uptake and awareness (knowledge grading) of COVID-19 and COVID-19 vaccine. Having a good level of knowledge is associated with a higher chance of getting vaccinated. However, other factors may influence actual vaccination.

Key words: COVID-19; Vaccines; Vaccination Coverage; Nigeria; Education; Medical; Undergraduate (Source: MeSH-NLM).

BACKGROUND: With the resumption of physical learning activities across Nigeria's higher education institutions, tertiary-level students, a prioritized group according to the WHO SAGE in the deployment of the COVID-19 vaccines, face circumstances that necessitate widespread vaccination coverage among them. This is critical in view of vaccine hesitancy attitude and low vaccination coverage that has been reported among this subpopulation and the larger Nigerian populace. Surmounting these barriers is necessary to achieving a successful national vaccination program and for future pandemic preparedness and response. To this end, this study aimed to assess Nigerian undergraduate students' knowledge, coverage, and barriers to COVID-19 vaccination. **METHODS**: A cross-sectional survey of Nigerian undergraduates was conducted in October 2021, using an online questionnaire and a non-probability convenient sampling technique. The questionnaire included sections on respondents' demographic characteristics, COVID-19 vaccine awareness, coverage, barriers, and recommendations. A total of 326 respondents electronically completed and returned the informed consent form along with the questionnaire. Microsoft Excel spreadsheet and statistical package for the social sciences (SPSS) version 25 were used to code and analyze the data, respectively. **RESULTS**: The overall awareness of COVID-19 vaccines among the sampled students were high, with 62.3% having good knowledge, 20.9% having average knowledge, and 16.9% having poor knowledge. However, the majority of the respondents (81.3%) had not received the vaccines. The most prominent barrier to vaccination was misinformation about vaccine safety (23.6%). Opening vaccination centers on campuses (18.6%), demonstrating vaccine effectiveness and safety (18.7%), and organizing awareness campaigns (17.2%) were the most frequently recommended actions. **CONCLUSION**: Most respondents were aware of the availability and potential benefits of COVID-19 vaccines; however, coverage remained extremely low. Our findings emphasize the importance of addressing vaccination barriers by public health stakeholders to achieve optimal COVID-19 vaccine coverage.

58. **PERCUTANEOUS TRANSLUMINAL ANGIOPLASTY (PTA) AND STENT IMPLANTATION IN HEMODIALYSIS PATIENTS WITH CENTRAL VENOUS STENOSIS: A STUDY OF OUTCOMES**

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BACKGROUND: Central venous stenosis and occlusion are serious complications that can arise from central venous catheterization in hemodialysis patients, leading to significant difficulties in the dialysis process. Common clinical manifestations include swelling in the arm or neck on the affected side and compromised hemodialysis access. To address this issue, percutaneous balloon angioplasty and stent implantation have emerged as potential solutions to maintain vein patency. However, there is a need to evaluate the efficacy of these interventions over an extended period to determine their long-term benefits. This study aimed to monitor the patency status periodically, starting at 1st Month, followed by assessments at 3rd Month, 6th Month, and finally, the 12th Month. **METHODS**: This single-center observational study focused on endovascular interventions performed on hemodialysis patients with central venous stenosis or occlusion. Participants included end-stage renal failure patients undergoing hemodialysis who exhibited clinical signs of central venous stenosis or occlusion. Data were collected from 60 patients, consisting of 42 males (70%) and 18 females (30%), with an average age of 46.19±13.21 years. The affected sites of central vein stenosis or occlusion were distributed as follows: 13 cases in the innominate veins, 25 cases in the superior vena cava, 18 cases in the brachiocephalic vein, and 10 cases in the subclavian vein. Some patients had multiple site occlusions, while others experienced occlusion of AV fistula. **RESULTS**: Of the 60 endovascular procedures performed, only one case did not achieve technical success, resulting in an overall success rate of 96.4%. Stent implantation was carried out in only four patients. No significant procedure-related complications were encountered, and all patients were able to undergo hemodialysis after the initial intervention. The primary patency rates for PTA at 1, 3, 6, and 12 months were 96%, 92%, 88%, and 86%, respectively. As for stent implantation, the primary patency rates at 1, 3, 6, and 12 months were 100%, 98%, 98%, and 98%, respectively. Assisted primary patency rates for PTA at 1, 3, 6, and 12 months were 2%, 6%, 11%, and 14%, respectively. During the 12-month follow-up, 10 reinterventions were performed, with three patients requiring more than two reinterventions. **CONCLUSION**: The study's findings demonstrate that endovascular interventions, such as percutaneous balloon angioplasty and stent implantation, are highly effective in managing central venous stenosis or occlusion in hemodialysis patients. These interventions showed a remarkable success rate and a minimal occurrence of procedure-related complications. Particularly, stent implantation consistently exhibited 100% primary patency at all evaluated time points. While the assisted primary patency rates for PTA were relatively lower, the overall need for reinterventions remained low, emphasizing the long-term benefits of these procedures. Based on these promising results, endovascular interventions can be considered as a viable and efficient option for the management of central venous stenosis or occlusion in hemodialysis patients, offering improved hemodialysis access and ensuring enhanced patient outcomes.

Figure. A- The lesion was successfully crossed anterogradely using a guide wire, followed by performing percutaneous transluminal angioplasty (PTA); B- After the PTA procedure, a post-PTA venogram revealed normal filling of the right subclavian vein. During the 12-month follow-up period, there was no recurrence of the lesion in the patient.
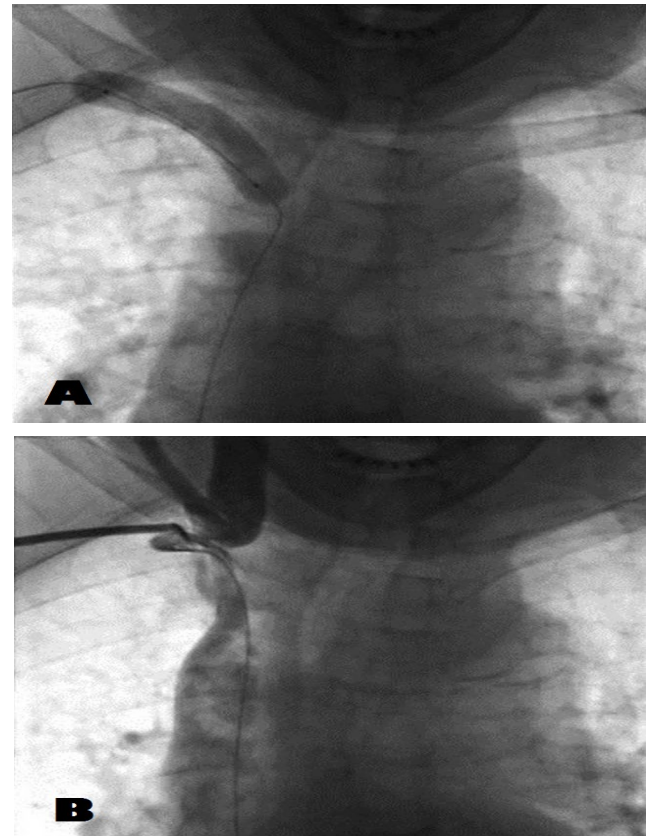
Key words: Angioplasty; Percutaneous Transluminal; Stents; Dialyses (Source: MeSH-NLM).

59. **OBSTRUCTIVE SLEEP APNEA IN AN INDIAN POPULATION: A CROSS SECTIONAL STUDY**

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BACKGROUND: Obstructive sleep apnea (OSA) is a sleep-related breathing disorder, associated with impaired ventilation during sleep and disruption of sleep; which is defined on the basis of nocturnal and daytime symptoms as well as sleep study findings. It's associated with certain risk factors, namely – obesity, male sex, advancing age, hypertension, chronic consumption of alcohol and sedatives, along with positive family history. Any unexplained systemic or pulmonary hypertension, new-onset arrhythmias, polycythemia, personality and mood changes (including depression, anxiety), or cognitive defects are often linked to sleep disturbances and OSA. AIMS: Consequently, this study had 2 primary aims that were intended to be achieved by certain objectives: To screen an apparently healthy adult Indian population for prevalence of OSA amidst them, by – assessing the cardinal predisposing factors;and appraising extent of daytime sleepiness, fatigue and sleep status of volunteers. To significantly curb the incidence of OSA, by – counselling affected individuals to remodel their *modus vivendi*; and creating awareness amongst general public. **METHODS**: Subsequent to procuring assent from the Institutional Ethics Committee, for this cross-sectional, time-based study (of 3 months), a multiple-choice questionnaire was responded by 1078 Indian adults. Considering the specific target population of each, this questionnaire was an amalgamation of the three standard, subjective, clinical tools, namely: Berlin Questionnaire (BQ), STOP-BANG Questionnaire (SBQ), Epworth Sleepiness Scale (ESS). Responses were thoroughly and discretely analyzed, using the elementary Microsoft 365 Excel, in tandem with IBM SPSS ver29. Suggested appropriate lifestyle changes to those seemingly affected with OSA, by reaching out through the affiliated email address (thesleepperils@gmail.com). OSA Awareness campaigns organized for the general public. **RESULTS**: According to the data collected (margin of error ±3% at 95% confidence interval), 11.78% and 5.75% of the participants were found highly vulnerable to OSA, using the BQ and SBQ tools, respectively. ESS depicted that more than one-fourth of the participants are susceptible to OSA. In congruence with similar studies conducted across the globe, this research has also concluded that males are significantly more prone to OSA than females. **CONCLUSION**: The public health impact of obstructive sleep apnea is escalating, particularly in developing countries like India, because of increasing urbanization leading to sedentary lifestyles, and its potential contribution to the worsening rates of cardiovascular disease, diabetes and other co-morbidities. Identifying and addressing lifestyle and behavioral factors as well as comorbidities that may be exacerbating OSA, by budding clinicians is a must for a comprehensive management of obstructive sleep apnea. Consequently, the ultimate aim of this study was to diagnose obstructive sleep apnea at an early stage; along with analyzing the national burden of the ailment.

Table. Prevalence of Obstructive Sleep Apnea (OSA) in an Indian Adult Population: Results and Risk Factors.

Participants	ESS Excessive Daytime Sleepiness	BQ High Risk	SBQ High Risk	SBQ Intermediate Risk	All 3 tools combined Extreme Risk
Males (n1=686)	179 (26.09%)	88 (12.83%)	54 (7.87%)	201 (29.30%)	27 (3.94%)
Females (n2=391)	103 (26.34%)	39 (9.97%)	8 (2.05%)	30 (7.67%)	10 (2.56%)
Total Sample (n0=1078)	282 (26.16%)	127 (11.78%)	62 (5.75%)	231 (21.43%)	37 (3.43%)

Abstracts

60. **SOCIAL REPRESENTATIONS OF SUICIDE IN PATIENTS WITH SUICIDE ATTEMPT HOSPITALIZED IN A MENTAL HEALTH INSTITUTION**

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BACKGROUND: The suicide rate in the last 45 years has increased considerably in the world, being the frequency of attempted suicide 20 times higher than that of completed suicide. Pereira is one of the cities with the highest rates in the country. **METHODS**: This qualitative research uses grounded theory as an analysis method, obtaining the data through semi-structured open-type interviews with selective purposive sampling. The analysis of the interviews was done through the grounded theory method and the results are expressed through the theory of social representations. **RESULTS**: The findings of this research present the discourse of hospitalized patients with suicide attempt. According to social representations, family and derivatives are vital for individual development and their relationship with the environment. Dysfunctions in the family nucleus increase the risk of developing negative thoughts, which can later turn into suicidal behavior. Associated psychiatric pathologies, low self-esteem, relationship problems, sexual abuse and feelings of rejection are risk factors, while study, life projects, and spirituality are protective factors. No relationship was found regarding the consumption of psychoactive substances. **CONCLUSION**: The family is fundamental in the configuration of the individual and its role as a protective or risk factor in terms of suicide attempt depends on its functionality. It is suggested that work in the families could serve as a strategy for the prevention of the non-fatal suicidal act.

Key words: Interview; Suicide Attempt; Suicide; Qualitative Research; Family Relations; Mental Health (Source: MeSH-NLM).

61. **USE OF STENT IN CHOLEDOCHOCHOLEDOCHOSTOMY FOR PEDIATRIC LIVER TRANSPLANTATION SECONDARY TO HEPATOBLASTOMA: A CASE REPORT**

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BACKGROUND: Hepatoblastoma is a malignant tumor with an insidious clinical presentation, however, it is characterized by an increase in abdominal circumference. In addition, there is PRETEXT staging based on the degree of liver involvement, which ranges from I to IV, of these, for stage IV the treatment of choice is liver transplantation. In addition, the use of stents in the the choledocho – choledochostomy has been tried to reduce post-transplant complications, with variable results. **THE CASE**: A 18-month-old female with a diagnosis of PRETEXT IV hepatoblastoma and a history of receiving 11 cycles of chemotherapy (CTX) with SIOPEL-3HR scheme, subsequently initiates protocol to receive liver transplantation for being an ideal candidate and PRETEXT IV staging, received from a related living donor. During surgery, it was decided to place a biodegradable stent to perform the choledocho – choledochostomy. She also had hemorrhagic shock grade IV secondary to blood loss, which was successfully resolved. In her first two days post-transplantation she presented adequate flows by Doppler ultrasound and liver enzymes with a downward trend, which remained with the same trend, and she was discharged on day 26 post-transplantation. The following month, she received a cycle of adjuvant CTX with SIOPEL-3HR scheme, without complications. One month later she presented cholestasis and jaundice, so the stent was removed. Currently free of disease, functional graft, and adequate psychomotor development. **CONCLUSION**: Although the use of a stent was intended to prevent complications such as biliary obstruction, since it is the most feared complication during liver transplantation, this was not the case of the patient, so it could be considered that it continues to be a controversial technique. Also, the use of chemotherapy after transplantation is important to be free of disease since clinical studies have shown an increase in patient survival.

Key words: Pediatrics; Transplantation; Hepatoblastoma (Source: MeSH-NLM).

Abstracts

62. AWARENESS AMONG GIRL HEALTHCARE STUDENTS REGARDING PHYSIOLOGICAL NATURE OF VAGINAL DISCHARGE

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BACKGROUND: Leucorrhoea also spelled leukorrhoea, as a flow of a whitish, yellow, or greenish discharge from the vagina of the female that may be normal or that may be a sign of infection. Commonly, physiological vaginal discharge is confused with being associated with some pathology. AIMS: The aim of this study was; to estimate the percentage of awareness about physiological nature of vaginal discharge in MBBS students; Paramedical students and Nursing students, to estimate the percentage of women experiencing vaginal white discharge, estimating the percentage of women/girls who consult doctors because of vaginal white discharge, advising women/girls with pathological vaginal discharge for consultation. **METHODS**: The present cross sectional study was done among female students from Medical, Paramedical and Nursing branch of Chirayu Medical College and Hospital, Bhopal. Total number of 246 female students were taken into the study. They were provided with a questionnaire consisting of 30 questions, which was divided into sections of; Awareness, Evaluation, Practice and Knowledge. The answers given by the three groups were compared for studying awareness regarding physiological nature of vaginal discharge. Nature of vaginal discharge experienced by individual students was also evaluated. Comparison of Practices followed by the students in daily life was also done. Knowledge regarding vaginal discharge was studied. **RESULTS**: Students were scored on basis of their answer in knowledge and awareness; each correct answer awarded 1 point and incorrect answer awarded 0. Unpaired t Test for comparing the Awareness Scores shows significant inter-group variation in awareness. Medical students had significantly higher awareness about vaginal discharge as compared to the other two groups. Further, Awareness of the paramedical group was higher than the nursing group. Overall responses within each group were however homogenous, representing comparable intra-group awareness about vaginal discharge. Similar findings were seen for knowledge scoring. **CONCLUSION**: It was found that Awareness & knowledge regarding physiological vaginal white discharge is highest in medical students followed by paramedical & nursing students. Nursing students consult doctors the most, medical students consult the least. But the positive and negative attitude towards the discharge is homogeneous in all the groups. A small portion of medical students had never experienced vaginal discharge.

Table. Awareness.

	Medical (n=189)			Paramedical (n=22)			Nursing (n=35)		
	Yes	No	No response	Yes	No	No response	Yes	No	No response
1) Do you perceive vaginal discharge to be normal	154(81.5)	20 (10.6)	15 (7.9)	17(77.3)	4 (18.2)	1 (4.5)	22(62.9)	12 (34.3)	1 (2.9)
2)Do you know difference between normal vaginal discharge and discharge due to some pathology	140 (74.1)	35 (18.5)	14 (7.4)	18 (81.8)	3 (13.6)	1 (4.5)	16 (45.7)	17 (48.6)	2 (5.7)
3)Do you know that vaginal discharge can be present, even if there is no disease or abnormality	171 (90.5)	3 (1.6)	15 (7.9)	20 (90.9)	1 (4.5)	1 (4.5)	20 (57.1)	13 (37.1)	2 (5.7)
4)Do you know that every vaginal discharge does not require treatment	170 (89.9)	5 (2.6)	14 (7.4)	19 (86.4)	2 (9.1)	1 (4.5)	22 (62.9)	10 (28.6)	3 (8.6)
5)Are you aware that physiological vaginal discharge is not related to sensation of weakness, weight loss	157 (83.1)	18 (9.5)	14 (7.4)	18 (81.8)	3 (13.6)	1 (4.5)	18 (51.4)	16 (45.7)	1 (2.9)
6)Are you aware that physiological vaginal dish is not related to bone loss	150 (79.4)	25 (13.2)	14 (7.4)	8 (36.4)	13 (59.1)	1 (4.5)	21 (60)	13 (37.1)	1 (2.9)

Key words: Obstetrics and Gynecology; Questionnaire; Vaginal Discharges; Awareness; Health Knowledge, Attitude and Practice; Evaluation; Medical students; Nursing Student (Source: MeSH-NLM).

63. **DEVELOPMENT AND ASSESSMENT OF A CURRICULUM TO TRAIN MEDICAL STUDENTS TO RESPOND TO MOTOR VEHICLE COLLISIONS IN THE COMMUNITY**

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BACKGROUND: Healthcare providers may encounter opportunities to aid victims of motor vehicle collisions (MVCs) in the community as a bridge to pre-hospital care. Little is known about providers' experience, comfort, and knowledge in responding to community MVCs. Our objective was to describe the development of a novel curriculum for educating providers on responding to community MVCs as part of a 6-session medical student elective course on community emergencies. **METHODS**: We performed a needs assessment through a survey sent to a multi-center convenience sample of physicians, resident trainees, and mid-level providers. We measured the frequency in which providers encountered MVCs as well as used a 5-Point Likert scale to assess their comfort responding, barriers to helping, and interest in learning more about assisting in MVCs. Free text responses about topics of interest were solicited and categorized into common themes. An educational session for medical students on responding to MVCs in the community was informed by the survey of healthcare providers. A pre- and post-course survey using a 5-Point Likert Scale was administered one month before and after the course to assess medical students' comfort assisting in an MVC. **RESULTS**: There were 132 respondents to our needs assessment survey (122 MDs, 6 NPs, and 4 PAs). The most common specialties were general pediatrics (n=43, 33%), emergency medicine (n=25, 19%), and pediatric emergency medicine (n=24, 18%). Fifty-seven (43%) of the providers had the opportunity to assist in 1 or more MVCs, with 50 (89%) providing care at that time. Of providers with over 20 years in practice, 70% had the opportunity to aid in a community MVC (Figure 1). Forty-three (33%) of the providers stated they were "somewhat uncomfortable" or "very uncomfortable" assisting in an MVC. Eighty (62%) of the providers were "somewhat" or "very interested" in learning more about the topic. Provider respondents (n= 107, 81%) gave free text responses with most questions relating to preparedness, scene management, and sociolegal concerns such as liability. Eighty medical students participated in the elective course in community emergencies (53 first-years, 23 second-years, 3 third-years, and 1 fourth-year), which included a 75-minute session on responding to MVCs in the community comprised of a didactic, case presentations, and discussion. Based on the needs assessment, the session included content on Good Samaritan laws and liability, equipment preparedness, and specific aspects of on-scene management. Pre-course, medical students reported a median Likert Score of 2 (somewhat uncomfortable) for assisting in a community MVC, IQR (1,3). Post-course, the median Likert Score was 4 (somewhat comfortable), IQR (3,4). **CONCLUSION**: Health care providers are likely to have an opportunity to assist in community MVCs. Survey results informed learning needs for a medical student course that improved their comfort in responding to community MVCs. Future work will use survey content to inform a literature review article.

Figure. Percentage of Medical Providers that have had an Opportunity to Assist in a Motor Vehicle Collision (MVC) in the Community.
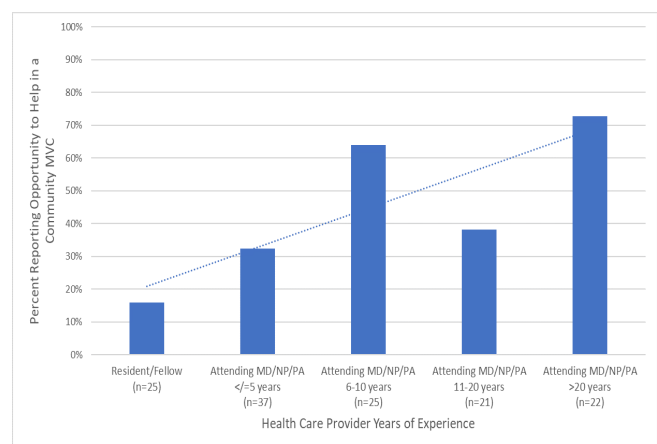
Legend: Survey respondents who have had the opportunity to assist in at least one MVC in the community based on years in practice.

Key words: Accidents, Traffic; Liability; Legal; Education; Medical; Wounds and Injuries (Source: MeSH-NLM).

Abstracts

64. **EXPLORING SPORTS BETTING PREVALENCE, PATTERNS, EFFECTS, AND ASSOCIATED FACTORS AMONG UNDERGRADUATE STUDENTS IN A NIGERIAN UNIVERSITY — A CROSS-SECTIONAL STUDY**

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BACKGROUND: The rise of legalized gambling, fueled by technology and social media, has transformed betting into a risky economic activity that promises income. In Nigeria, sports betting has become increasingly popular among youths, particularly university students, with easy online access contributing to its prevalence. However, inadequate awareness of its risks and impact on academics persists due to the perception that sports betting lacks overt physical manifestations. Research is needed to increase understanding of sports betting's patterns, correlates, and impact, especially among undergraduates. **AIMS**: This study aimed to shed light on the prevalence, patterns, and implications of sports betting among undergraduates at the University of Calabar, to foster comprehensive solutions to address its negative consequences on academic performance and overall well-being. **METHODS**: A cross-sectional study was conducted on undergraduate students of a federal University in Nigeria. Multistage randomized sampling was utilized to recruit 406 participants for the study. Seventeen departments were selected using simple random sampling, and one class was chosen from each department through balloting, resulting in a total of 17 classes. Proportional allocation was used to determine the number of participants required from each class, and systematic sampling was employed to select the participants. Data was collected using a standardized questionnaire adapted from the British Gambling Prevalence Survey, with the Problem Gambling Severity Index used to assess the prevalence of problem gambling and the effects of sports betting on bettors. Motivations for sports betting were assessed using the Reasons for Gambling Questionnaire. The impact of sports betting on academics was evaluated using a separate set of questions. Data were analyzed using IBM SPSS version 26; p-values less than 0.05 were considered significant. **RESULTS**: Out of 406 undergraduate respondents, 36.7% had engaged in sports betting, with 30.3% participating in the past year. Among past-year gamblers, 21.9% bet as frequently as 2-3 days a week, 18.7% bet 2-3 days a month, and 15.40% bet daily. Football was the preferred sport for 95.9% of sports bettors. Two-thirds of past-year gamblers used online platforms for betting, while 32.5% utilized land-based venues. Most sports bettors (87.8%) were motivated by monetary consideration, while 10.5% did so out of fear of missing out. Advertisements influenced 56.1% of respondents' decisions to place bets. Problem gambling prevalence was 14.3% in the study population and 47.2% among past-year gamblers. Negative academic impacts were reported by 64.2% of past-year gamblers. In bivariate analysis, a p-value <0.05 was considered significant, and age, sex, and monthly income had a significant relationship with lifetime gambling prevalence. Sex and socioeconomic status were significantly associated with problem gambling. Regular gambling was significantly related to academic performance. **CONCLUSION**: Gambling is prevalent among undergraduates and a significant proportion develop addictive disorders like problem gambling requiring mental health rehabilitation. This study underscores the necessity of interventions, regulations, and support services to tackle the prevalence and consequences of sports betting among students. Recommendations include education campaigns, age verification, financial literacy programs, and support groups to empower students and address potential negative impacts.

Table. Association between Socio-demographic factors and Problem gambling (N=406).

Variable	Problem Gambling		Chi-square	p-value
	Yes n (%)	No n (%)		
Age group				
<18	0 (0.0)	13 (3.7)	FET**	0.054
18 – 25	54 (96.4)	313 (89.4)		
26 – 33	2 (3.6)	13 (3.7)		
>33	0 (0.0)	11 (3.1)		
Sex				
Male	40 (82.1)	185 (52.9)	51.953	**<0.001***
Female	10 (17.9)	165 (47.1)		
Monthly income				
<15,000 (low socioeconomic class)	20 (35.7)	134 (38.3)	10.538	**0.032***
15,000-45,000 (middle socioeconomic class)	26 (46.4)	183 (52.2)		
>45,000 (high socioeconomic class)	10 (17.9)	33 (9.4)		

Legend: *indicates significant results based on approximations used in the chi-square test. **indicates that a Fischer Exact Test was used instead of a chi-square test because the sample size was small and expected cell categories below the threshold in the age categories.

65. **AN UNDERVALUED DIAGNOSIS: POST-TRAUMATIC STRESS DISORDER IN THE PERINATAL PERIOD: A CASE REPORT**

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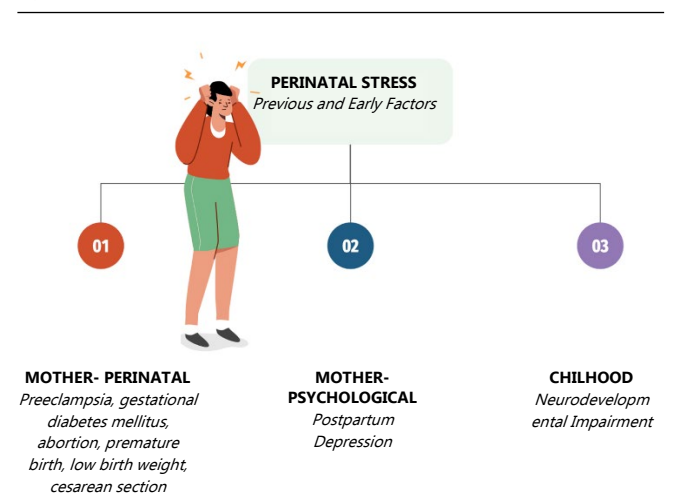
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BACKGROUND: Perinatal Post-Traumatic Stress Disorder (PTSD) is a disorder that occurs around childbirth, typically after a traumatic birth experience, where women may feel violated due to traumatic childbirth interventions they cannot control. Traumatic birth is defined as an event in which the mother perceives a real or perceived threat to herself or her baby, causing intense fear, helplessness, and horror. This can be considered an obstetric sequel. It is relevant to note that among pregnant women, perinatal PTSD is the third most common psychiatric disorder, with a prevalence ranging from 0.8% to 43% worldwide. Despite its significance, it is little-known, underdiagnosed, and often confused with other conditions such as depression or anxiety. Furthermore, it results in serious family, social, and occupational dysfunctions and is associated with other pathologies. Clinically, women with perinatal PTSD experience symptoms such as re-experiencing the event, detachment from the newborn, nightmares, irritability, and rejection of motherhood. This can lead to consequences for the mother, ranging from a desire not to become pregnant again to severe symptoms such as dissociation, stress, anxiety, and depression. It also affects those close to the mother, such as the partner and family. The aim of this work is to describe perinatal PTSD and emphasize the importance of early identification and appropriate treatment by medical professionals for the benefit of mothers and their children **THE CASE**: We describe a 35-year-old patient with a history of mixed depressive and anxiety disorder since 2018 experiences perinatal post-traumatic stress disorder. This is related to physical and verbal abuse during her second childbirth, resulting in a traumatic experience. Her childhood was marked by the feeling that her mother favored her younger sister and subjected her to physical and emotional abuse. The first pregnancy was unplanned, and she faced humiliation and abandonment by her partner. Despite the circumstances, the birth was a positive experience. The second pregnancy was planned and desired, but during childbirth in a different clinic from the first, she experienced inadequate care conditions, a lack of privacy, and physical abuse by medical staff. She also received inappropriate comments from the attending gynecologist. During the postpartum period, she shared a room with a cancer patient, complicating her experience. After childbirth, she experienced a hypertensive disorder in the postpartum and chose not to return to the hospital where she gave birth due to her traumatic experiences. Overall, her story reveals a series of challenging experiences related to motherhood that have contributed to her current mental health state. **CONCLUSION**: Perinatal PTSD is a psychiatric disorder that affects a significant number of pregnant and postpartum women. Its prevalence varies widely, reflecting the need for increased awareness and early detection. Despite its considerable impact on maternal mental health and well-being, perinatal PTSD is often overlooked or confused with other conditions such as depression and anxiety. It's important to raise awareness among medical staff about this disorder and provide a comprehensive and empathetic approach to enhance care for mothers during childbirth and the postpartum period.

Figure. Maternal and Child Consequences.

PERINATAL STRESS
Previous and Early Factors

01 **MOTHER- PERINATAL**
Preeclampsia, gestational diabetes mellitus, abortion, premature birth, low birth weight, cesarean section

02 **MOTHER-PSYCHOLOGICAL**
Postpartum Depression

03 **CHILHOOD**
Neurodevelopmental Impairment

Abstracts

66. **ASSESSMENT OF TRADITIONAL HERBAL REMEDIES USE AND MEDICAL TREATMENT AMONG HYPERTENSIVE PATIENTS ATTENDING PRIMARY HEALTH CARE CENTERS IN KHARTOUM STATE, SUDAN 2022-2023**

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BACKGROUND: Hypertension is the leading risk factor for cardiovascular disease mortality worldwide. It affects approximately 74.7 million people in Sub-Saharan Africa, and this figure is expected to increase to 125.5 million by 2025. Although antihypertensive drugs have been used to decrease blood pressure; traditional herbal remedies have been utilized within local or regional practices, in up to 80% of African populations. The current study was carried out to assess adherence to medications and perception of Hypertensive patients regarding use of herbal treatment. **METHODS**: This was a descriptive cross-sectional facility centers-based study at 3 PHC centers. A total of 100 hypertensive patients were enrolled using multi-stage sampling. The data was collected by modified open and closed ended interview questionaries. Modified Morisky score system was used to assess adherence to medical treatment. **RESULTS**: The study population was 100 participants of which (57%) were females. Most of the participants (77%) were in the age group of 51 and above, (49%) had secondary and higher levels of education, (66%) were using Single type of drug and (77%) were in regular clinical checkup, (90%) were taking their medications as prescribed by their physicians, (58%) were diagnosed before ten years or more, (43%) had Diabetes as co-morbid. Fifty one percent of the participants had low adherence to medication. Forty nine percent of participants used herbal remedies with 67.3% of them had low adherence to their medications; Hibiscus was the most used herb (31%). There was significant association between lack of adherence and the medication unavailability ($p = .009$). There was significant association between lack of adherence and taking more than one medication ($p = 0.001$);and between lack of adherence and lack of confidence in medical treatment ($p = 0.012$). **CONCLUSION**: A significant proportion of hypertensive patients are using herbal remedies which is negatively affects their adherence to the prescribed medications.

Key words: Traditional Herbal Remedies; Hypertension; Primary Health Care Centers; Medical Treatment; IJMS (Source: MeSH-NLM).

67. **IMPACT OF USMLE STEP 1 TRANSITION TO PASS/FAIL SCORING SYSTEM ON MEDICAL STUDENTS' ANXIETY, SLEEP QUALITY, AND BURNOUT**

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BACKGROUND: Originally designed to evaluate the application of foundational scientific knowledge in clinical contexts, the United States Medical License Exam Step 1 evolved into a comparative tool for assessing candidates' educational foundations. This transition heightened the pressure on medical students to excel in the exam. In response, collaborative efforts involving the National Board of Medical Examiners prompted a significant change from reporting scores to a pass/fail system. However, the true impact of this shift remains insufficiently explored. This study aims to assess the emotional toll - encompassing burnout, anxiety, depression, and sleep quality - experienced prior to taking the Step 1 exam. Additionally, it aims to uncover potential gender-based disparities in perceived stress, anxiety, and depression. **METHODS**: The study encompasses the entirety of third-year medical students at Drexel University College of Medicine, who were invited to participate in a comprehensive survey. Drawing from retrospection, the survey relies on self-reported data regarding anxiety, depression, sleep quality index, and burnout levels. Data compilation was anonymized and executed through the Qualtrics platform. **RESULTS**: A total of 102 medical students completed the survey, with a 97% pass rate for the USMLE Step 1. Despite their excellent performance, 75% of students reported inadequate sleep quality, and 68% exhibited mild to moderate anxiety levels. Among them, a higher percentage of females (83%) experienced mild to moderate anxiety compared to their male counterparts (50%). Furthermore, 66% of students felt that their commitment to education exceeded what was reasonable for their well-being. **CONCLUSION**: The transition from traditional scoring to a pass/fail system was ostensibly intended to enhance the mental well-being of medical students. Nevertheless, our findings underscore that students continue to grapple with heightened levels of stress, anxiety, and burnout during the pivotal month leading up to the Step 1 examination.

Key words: Medical Education; Medical Students; Medicine (Source: MeSH-NLM).

Abstracts

68.   **DEPRESSION SCALE IN STUDENTS IN TWO SCHOOLS IN RISARALDA, COLOMBIA**

Alejandro Londoño Amariles[1], Tomás Ramirez Cardona[1], Bryam Fernando Holguín Muñoz[1], Mariana Alexandra Herrera Caicedo[1], Maria José Marin Toro[1], Daniel Millán Morales[1], Juan Pablo Valencia Osorio[1], Oscar Felipe Suarez Brochero[2].

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BACKGROUND: Depressive episodes encompass a spectrum of affective disorders that distinguish themselves by the number and severity of symptoms, yet ultimately converge into a common conceptualization. Within a depressive episode, the primary characteristic is a diminished mood, accompanied by reduced energy and the inability to derive pleasure from activities that were once of interest. Depression also extends its reach to the pediatric population, constituting a distinct clinical entity with comparable features to adult depression. In children, it manifests with mood disturbances that interfere with their cognition and behavior, often marked by prolonged subjective feelings of sadness. This demographic, however, exhibits a unique vulnerability to masking the symptoms of depressive disorders or episodes, owing to the challenge minors face in recognizing their own emotional experiences and expressing them verbally. Globally, mood disorders have a prevalence ranging from 0.5% to 3%. The prevalence of depression among children aged 6 to 12 is estimated at 2.8%, rising to 4% to 8% among preadolescents and adolescents. Among teenagers, the prevalence is higher in females, with a 2:1 ratio. In Colombia, it is estimated that 54% of children aged 8 to 14 exhibit depressive symptomatology. This demographic is particularly prone to concealing depressive disorder symptoms, underscoring the necessity of describing the frequency of depressive symptomatology in children across different social conditions and delineating risk factors associated with depression manifestation in this age group. **METHODS**: An observational, descriptive, and cross-sectional study was conducted, involving the administration of the Children's Depression Scale and the collection of sociodemographic data (age and gender) from a population of 167 schoolchildren aged 8 to 14 (5th to 7th grade), hailing from both public and private educational institutions in the Risaralda department. It is important to note that, although the instrument has not been validated in Colombia, it has undergone validation in Mexico. STATA 14.0 was employed for data analysis. **RESULTS**: Findings indicated a higher participation of students from private schools and a greater incidence of depressive indices in girls as opposed to boys, particularly in the sixth and seventh grades, regardless of the educational institution. **CONCLUSION**: It is concluded that the sociodemographic factor most closely associated with the development of depressive symptomatology in children, girls, and preadolescents, as measured by the Children's Depression Scale, is female sex. The sub-scales miscellaneous depressive, guilt, and preoccupation with sickness and death were statistically significant with respect to sex. Furthermore, age and grade displayed a directly proportional relationship with the total Depressive score, while the type of school did not exhibit statistical significance in depressive symptomatology.

Table. Results of the Depression Scale by Areas and Subtotals According to sex in Schoolchildren in two Schools in Risaralda.

Variable	Result (n=167)	Men (n=46)	Women (n=75)	p-value
Age	11,3 años (1,2)	11,3 (1,1)	11,3 (1,2)	0,856
Grade				
Fifth	46 (27,5%)	29 (31,5%)	17 (22,6%)	0,287
Sixth	49 (29,3%)	23 (25,0%)	26 (34,6%)	
Seventh	72 (43,1%)	40 (43,4%)	32 (42,6%)	
Negative affective responses	20 (14-26)	17,5 (12-24)	22,0 (16-28)	0,001
Social problems	24 (17-30)	23,0 (16-28,5)	25,0 (19-31)	0,019
Negative self-esteem	24 (18-29)	22,5 (17-27)	25,0 (20-31)	0,007
Preoccupation with sickness and death	20 (15-25) 20,3 (6,8)	19.6 (6.1)	21.1 (7.5)	0,157
Guilt	25 (19-30)	23,5 (16-29)	26,0 (21-31)	0,037
Miscellaneous depressive	30 (25-36) 30,1 (7,2)	28,5 (6,9)	32,2 (6,9)	0.001
Total depressive	146 (113-168) 141,7 (39,8)	140 (105,5-162,5)	153 (122-186)	0,002
Pleasure and Enjoyment	32 (27-36)	33,0 (28-36)	30,0 (26-35)	0.037
Miscellaneous positives	37 (33-42)	37,0 (34-42)	36,0 (30-41)	0.071
Total positive	180 (150-202) 177,9 (36,8)	175 (143-196,5)	193 (162-222)	0,004

Key words: Depression; Children; Frequency; Symptoms; Signs (Source: MeSH-NLM).

69. **LEARNING OF INTIMATE AREA EXAMINATION AMONGST PAKISTANI MEDICAL STUDENTS: KAP STUDY**

Masooma Bakhtiari[1], Muhammad Tayyab Ijaz[1], Rana Mohammad Umar Farooq[1], Muhammad Imran Hameed Daula[2], Amna Shahab[2].

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BACKGROUND: Intimate area examination (IAE) is an integral part of clinical examination skills and must be mastered by medical students before they start their careers. This study explores the experiences of Pakistani medical students regarding learning of IAE, the associated barriers and their impacts on students' learning. **METHODS**: This cross-sectional study, based on a self-designed questionnaire was conducted at two Pakistani medical colleges which included final year students, and post graduate trainees. **RESULTS**: During their undergraduate training, 74.9% of the respondents had not conducted a female pelvic examination, 51.9% had not examined a female groin, 79.7% had not examined a female rectum and 72.7% had not examined a male rectum. From the 65 postgraduate doctors, 48.4% reported that they were not prepared to perform an IAE at the start of their clinical career. Regarding barriers to IAE learning more than half of the respondents felt that the opposite gender of the patient (64.7%) and patient's refusal (63.1%) had a strong negative impact on IAE learning. A high percentage of respondents reported that they were not taught IAE during their undergraduate years. Among the currently used pedagogical techniques, 71.1% of the respondents opted for real patient-based learning, followed by clinical simulations (21.9%), and videos (7.0%). No one thought examination should be taught theoretically. A significant difference between male and female experience in IAE learning was also observed. **CONCLUSION**: Learning of IAE remains unsatisfactory and poses a major challenge for the Pakistani Medical Students in the institutes included in this study.

Table. Percent of the Students who Performed Intimate-Area Examinations During the Clinical Training by the Medical Colleges and by Sex (n=187).

Clinical Exam	Participant Reply	Public N=83, n(%)	Private N=104, n(%)	p	Male N=,98 n(%)	Female N=,89 n(%)	P
Female breast	Yes	66(79.5)	79(76.0)	0.563	63(64.3)	82(92.1)	0.000
	No	17(20.5)	17(24.0)		35(35.7)	7(7.9)	
Female pelvis	Yes	22(26.5)	25(24.0)	0.699	10(10.2)	37(41.6)	0.000
	No	61(73.5)	79(76.0)		88(89.8)	52(58.4)	
Female groin	Yes	30(36.1)	60(57.7)	0.003	37(37.8)	53(59.6)	0.003
	No	53(63.9)	44(42.3)		61(62.2)	36(40.4)	
Female rectum	Yes	11(13.3)	27(26.0)	0.032	13(13.3)	25(28.1)	0.012
	No	72(86.7)	77(74.0)		85(86.7)	64(71.9)	
Male groin	Yes	63(75.9)	85(81.7)	0.330	83(84.7)	65(73.0)	0.05
	No	20(24.1)	19(18.3)		15(15.3)	24(27.0)	
Male Rectum	Yes	25(30.1)	24(23.1)	0.268	33(33.7)	16(18.0)	0.051
	No	58(69.9)	78(75.0)		64(65.3)	72(80.9)	

Legend: Public= King Edward Medical University. Private= CMH LMC & IOD.

Key words: Clinical Skills; Physical Examination; Medical Students; Teaching Techniques (Source: MeSH-NLM).

Abstracts

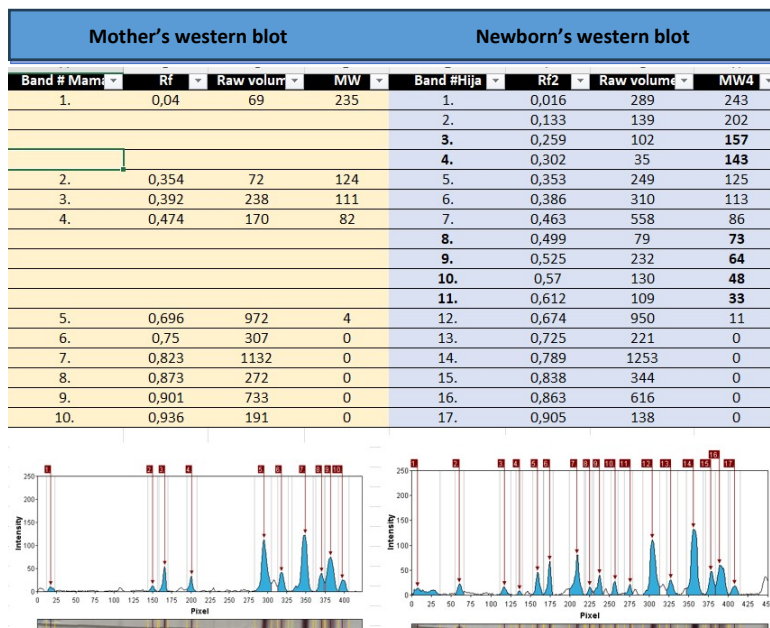70. **EVALUATION OF THE WESTERN BLOT DENSITOMETRY FOR THE DIAGNOSIS OF CONGENITAL TOXOPLASMOSIS**

Luis Felipe Mosquera Solano[1], María Antonia Restrepo Duque[1], Jocelyn Alexandra Arredondo Torres[1], Sebastián Serna Rivera[1], Juan David Fandiño López[1], Jorge E. Gómez M[2].

[1] Second year Medical Student. University of Quindío, Armenia, Colombia.

[2] MD. PhD Professor, University of Quindío, Armenia, Colombia.

BACKGROUND: Congenital toxoplasmosis can cause severe ocular and neurological sequels such hydrocephaly, seizures, and chorioretinitis, leading to permanent visual deficit and multiple neurological deficits, if left untreated. An early diagnosis is crucial to prevent the development of these consequences and western blot is the most important diagnostic tool for this disease in newborns, because can distinguish between antibodies transferred from the mother or those produced by the newborn. However, the reading of the results still being done by subjective analysis by expert clinical laboratory specialists, reaching a maximum of 73% of sensitivity. The digitalization of the image of the results of western blot and its analysis by a software quantifying the densitometry of the bands obtained by western blot assay can potentially improve the diagnostic performance of the technique. **METHODS**: Was evaluated the sensitivity and specificity by digitalizing pictures of western blot results from the laboratory of Biomedical Research at the University of Quindío and published in the scientific literature. For the research, GelAnalyzer 19.1 software was used to digitalize the bands from western blot membranes from mother and child serum and the molecular weight of protein bands was calculated. The images were from 15 cases of newborns during the first month of life (six from our laboratory and nine from literature), and five negative controls (three from the laboratory and two from literature). Definition of true cases were the persistence of IgM/IgA after day 10 of life, mother with IgG and IgM antibodies positive and newborn with positive IgG plus symptoms, or no decrease in IgG in follow-up. The true negative cases were all newborn whose become negative for IgG anti Toxoplasma before the month 10 of life in absence of treatment, indicating that were maternal passively transferred antibodies. **RESULTS**: When comparing the immunological profiles of the mothers and their children for IgG by densitometry, congenital infections were detected in 80% (12 out of 15) of the cases (sensitivity) in serum samples obtained during the first month of life. All controls were negative (100% specificity). There was a percentage of 53% (8 out of 15) of children not identifiable with the visual analysis performed by two undergraduate researchers, likewise, the specificity with observation was 57% (3 out of 5) contrasted with the present study. Finally, three bands were identified as the most common in newborns with congenital infection: 49 KDa, 98-97 KDa and 72 KDa proteins (in order of frequency). **CONCLUSION**: Digitalization of western blot images increase sensitivity for the diagnosis of newborn with congenital toxoplasmosis during the first month of life.

Figure. Densytometric Analisis of IgG anti *Toxoplasma* bands Profile Obtained by Western Blot Assay.

Densytometric Analisis of IgG anti Toxoplasmabands Profile Obtained by Western Blot Assay

Band # Mama	Rf	Raw volum	MW	Band #Hija	Rf2	Raw volume	MW4
1.	0,04	69	235	1.	0,016	289	243
				2.	0,133	139	202
				3.	0,259	102	**157**
				4.	0,302	35	**143**
2.	0,354	72	124	5.	0,353	249	125
3.	0,392	238	111	6.	0,386	310	113
4.	0,474	170	82	7.	0,463	558	86
				8.	0,499	79	**73**
				9.	0,525	232	**64**
				10.	0,57	130	**48**
				11.	0,612	109	**33**
5.	0,696	972	4	12.	0,674	950	11
6.	0,75	307	0	13.	0,725	221	0
7.	0,823	1132	0	14.	0,789	1253	0
8.	0,873	272	0	15.	0,838	344	0
9.	0,901	733	0	16.	0,863	616	0
10.	0,936	191	0	17.	0,905	138	0

-Peaks of 157,143. 73, 64, 48, 33 present in newborn but in mother.

-**Conclusion:** specific IgG produced by newborn, but not by the mother, indicating congenital infection.

Key words: Congenital Toxoplasmosis; Western Blot; Diagnosis of Toxoplasmosis (Source: MeSH-NLM).

71. MENTAL HEALTH CHALLENGES: ANXIETY AMONG MEDICAL STUDENTS - A CROSS-SECTIONAL ANALYTICAL STUDY

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BACKGROUND: Generalized Anxiety Disorder (GAD) is characterized by consistent and excessive worry, significantly impacting daily functioning and academic performance. Medical students encounter various challenges during their academic years and clinical rotations that put them at a higher risk of developing anxiety. In addition, Sudan is currently experiencing a complex social and political environment characterized by political unrest and economic crises. These factors may further increase medical students' risk of developing GAD. Unfortunately, limited research has been conducted on GAD among medical students in Sudan. This study aimed to determine GAD prevalence, assess risk factors, and examine its impact on academic achievement and daily activities among Sudanese medical students. METHODS: A cross-sectional analytical study was done among undergraduate medical students at Omdurman Islamic University in Sudan from January to February 2023. A systematic random sampling technique was used to select 374 participants. Data were collected via an electronic self-administered questionnaire comprising two parts: sociodemographic information and the Generalized Anxiety Disorder Questionnaire (GAD-7), a validated tool for screening and assessing GAD severity. Descriptive statistics, t-tests, one-way ANOVA, and multivariate regression analysis were used to analyze the data. Effect sizes were measured using Cohen's d and eta-squared. The cut-off p-value for statistical significance was set at < 0.05. RESULTS: The prevalence of generalized anxiety disorder (GAD) was 33.7%, with severity levels of 41.2% for mild anxiety, 21.4% for moderate anxiety, and 12.3% for severe anxiety. The mean GAD score was significantly higher among female medical students ($p < 0.001$) and those with chronic diseases ($p = 0.034$). GAD significantly impacted daily activities among those who reported higher GAD scores ($p < 0.001$). In multivariate regression analysis, medical students in the final year had almost 4.246 higher odds of having GAD [95% CI for AOR = 1.267, 14.221] ($p = 0.019$). Females had 2.4 times higher odds of having GAD [95% CI for AOR = 1.458, 3.946] ($p < 0.001$). CONCLUSION: The prevalence of generalized anxiety disorder (GAD) among Sudanese medical students is relatively high and has a detrimental impact on daily activities. Medical students in the final year have a higher risk of GAD, and significant associations were found between GAD and female sex, as well as chronic diseases. The high prevalence of GAD among medical students is concerning and highlights the urgent need for increased awareness, normalizing discussions about mental health issues, and providing resources and support to students struggling with anxiety. Universities should identify and offer medical students effective anxiety relief techniques and promote a wellness culture that encourages healthy routines such as regular exercise, sufficient rest, and effective stress management. Future research should evaluate the effectiveness of different interventions in preventing and treating GAD among medical students and identify and address the barriers to accessing mental health care for medical students in Sudan.

Figure. Generalized Anxiety Disorder Severity Levels Among Medical Students in Sudan (n= 374).

Generalized anxiety disorder severity levels among medical studnts in Sudan (n= 374)
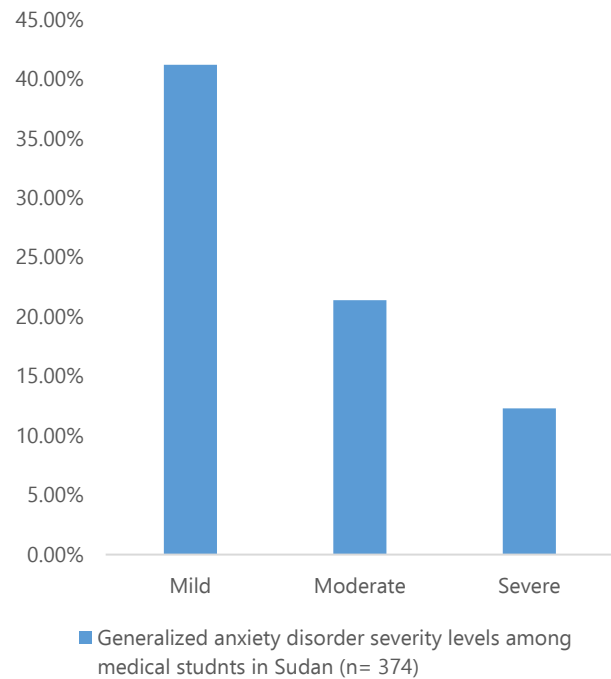
Key words: Generalized Anxiety Disorder; Medical Students; Prevalence; Risk Factors (Source: MeSH-NLM).

Abstracts

72. **CAUSES OF POSTPARTUM DEPRESSION AMONG SUDANESE WOMEN FROM 2019 TO 2021 IN TAHA BAASHER HOSPITAL**

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BACKGROUND: Postpartum depression (PPD) is a major and common mental health problem complicating maternal status after delivery, mainly associated with maternal suffering and altering the mental status for both herself and her offspring. It is a complex condition results mainly from a mix of physical, emotional, and behavioral changes happens to women after giving birth. The interactions between chemical, social, and psychological variables factors especially in newly mothers experience are probably responsible for initiation and ranges of postpartum depression. **METHODS**: This study will be conducted via Cohort – analytical study design based on retrospective database in the last 3 years from current day, will be conducted from Taha Baasher hospital medical records, a psychiatry department. The process started from October 2021. We used scientifically structured questionnaire as a tool to collect data from registered patient's data with approval from Alzaiem Alazhari University. **RESULTS**: Total of 79 cases have been studied in order to analyze the most prominent data they might have role in developing causes or risk factor of postpartum depression. The percentage of different parameters manly young age 62.5%, education of primary school 41.3%, with high percentage of positive family history of mental illness and previous history mental illness, 42.1% and 32.9% respectively. The majority of the cases have Moderate symptoms 53.8%, while 27.5% were Severe. The risk of patients was classified into homicidal 3.8% and suicidal were 7.7%. The final diagnosis of the cases was psychosis 76.5% and only 23.5% was depression. Treatment by drugs only was about 97.5%. **CONCLUSION**: Total of 79 cases have been studied in order to analyze the most prominent data they might have role in developing causes or risk factor of postpartum depression. The percentage of different parameters manly young age 62.5%, education of primary school 41.3%, with high percentage of positive family history of mental illness and previous history mental illness, 42.1% and 32.9% respectively. The majority of the cases have Moderate symptoms 53.8%, while 27.5% were Severe. The risk of patients was classified into homicidal 3.8% and suicidal were 7.7%. The final diagnosis of the cases was psychosis 76.5% and only 23.5% was depression. Treatment by drugs only was about 97.5%.

Key words: Postpartum Depression; Sudanese Women; Emotions; Mental Health; Postpartum Period (Source: MeSH-NLM).

73. **INDICATIONS AND COMPLICATIONS OF EMERGENCY HEMODIALYSIS AMONG PATIENTS WITH ACUTE KIDNEY INJURY ADMITTED IN HEMODIALYSIS CENTER AT BAHRI TEACHING HOSPITAL, KHARTOUM STATE, SUDAN 2021 - 2022**

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BACKGROUND: AKI is defined as abrupt decline in renal functions either due to structural damage or loss of function , associated with poor clinical outcomes for hospitalized patients. In the context of Sudan, highlighting the most common indications and complications that may occur during emergency hemodialysis and describing their presentation , may offer measures to minimize them by provide specific interventions to prevent the consequences when such emergencies arise. **AIMS**: To study the indications, and complications of emergency haemodialysis among patients admitted in haemodialysis center at Bahry teaching hospital, Khartoum state, Sudan . The study also aimed to describes the pattern of presentation in term of symptoms and signs reported among patients. **METHODS**: It's an observational descriptive cross sectional, hospital based study that was conducted at the renal haemodialysis center within the period from September 2021 to October 2022 and covered 149 patients with AKI who underwent emergency hemodialysis,this sample size was calculated using Epi calculator and then adjusted using the hospital records that described the frequency of admission of patients with AKI in the preceding 6 months and excluded obstetric AKI . Data was collected, prepared, entered and analyzed using SPSS version 25.0 in term of descriptive statistics and Bi-variable analysis to determine the associations between some relevant factors (demographic characteristics, indications and complications) with the occurrence of complications using Chi square test (for categorical variables) and t-test (quantitative variables). **RESULTS**: This study covered 149 participants. Nearly half of them 40.9% of the study participants were in the age group 30-60 years with male: female ratio of 2.3:1 and 44 % of the participants had co morbid illnesses with diabetes , hypertension and liver disease being the most common. Regarding the history of renal disease only 4.7 % had previous history and 10% had family history of renal disease .The most common indication for emergency haemodialysis was uremia 44%, followed by fluid overload that cannot be managed by diuretics 30%,worsening sever metabolic acidosis 10% and refractory hyperkalemia 4.7 % . Complications on the other hand occurred among 20% of the patients such as hypotension 8.7%, and hypoglycaemia 8.7%. There was significant association between certain social habits like smoking , middle age group as well as past history of renal disease with the development of complications (p value = 0.01 , 0.005 and 0.05 respectively). **CONCLUSION**: nearly half of the study participants were in the age group 30-60 years old with male: female ratio of 2.3:1. The most common indication for emergency haemodialysis was uremic gastropathy followed by Volume overload . Complications occurred among 20% of the participants such as hypotension and hypoglycaemia. *Recommendation,* Training of health care provider on how to deal with patient with AKI and when to include nephrologist in management to avoid dialysis and training of dialysis staff on early recognition and management of complication.
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Table. Indications of Emergency Hemodialysis.

Indications of emergency Hemodialysis	Frequency	Percentage%
Volume overload	45	30.20%
refractory Hyperkalemia	7	4.70%
Uremic gastropathy	66	44.30%
Worsening severe metabolic acidosis	15	10.10%
Pericarditis	1	0.70%
Encephalopathy	15	10.10%
Total	149	100

74. **BEHAVIOR OF MORTALITY FROM CARDIOVASCULAR DISEASES IN COLOMBIA AND RISARALDA FOR 17 YEARS. ANALYSIS AND RECOMMENDATIONS**

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BACKGROUND: Primary health care is in charge of identifying and managing risks. This identification is made through consultation with the application of screening in order to provide education, risk monitoring and make effective interventions in consultation. The objective was to identify the behavior of mortality from cardiovascular diseases in Colombia and Risaralda, from 1998 to 2015. **METHODS**: National Administrative Department of Statistics (DANE) death certificates were used from 1998 to 2015, with this a database was created and a data analysis program was carried out in time when they do not follow a time series. The most adjusted model was the LOESS regression or close regression model that was run in R. **RESULTS**: Mortality from hypertension, acute myocardial infarction and stroke has increased in recent years in Colombia and Risaralda, while mortality from heart failure has decreased. Regarding diabetes mellitus, it increased in Colombia, but decreased in Risaralda. **CONCLUSION**: Mortality due to cardiovascular diseases is for the same causes, therefore, greater emphasis should be placed on their prevention and screening. Clinical practice guidelines should be extended beyond the goals and focus more on these preventive strategies.

Figure. Mortality due to Arterial Hypertension in Colombia and Risaralda.

Colombia
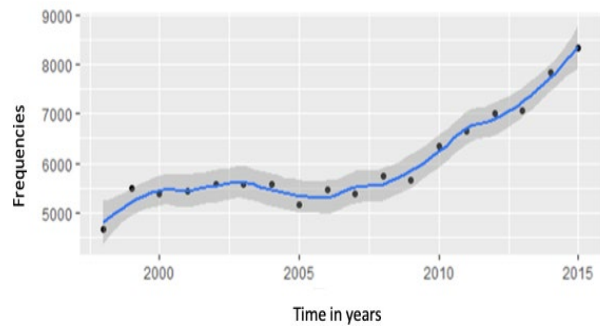
Risaralda
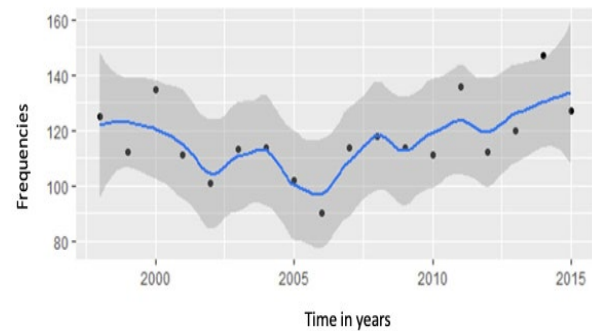
Key words: Cardiovascular Diseases; Mortality; Diabetes Mellitus; Stroke; Primary Prevention; General Practitioners (Source: MeSH-NLM).

75. **STRESS LEVELS AND COPING STRATEGIES IN MEDICAL STUDENTS AND ITS ASSOCIATION WITH SALIVARY IL-6 LEVELS**

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BACKGROUND: Medical students experience stress throughout their training period, to which they have built their own coping mechanisms. Stress alters various physiological processes, including markers like IL-6, a pro-inflammatory marker. The present study was conducted to assess the stress levels and coping strategies in medical students and its association with salivary IL-6 levels. **METHODS**: This descriptive study was conducted after obtaining institutional ethical clearance. Total of 76 undergraduate medical students who gave their consent, answered the Cohen's perceived stress scale and BriefCOPE questionnaire. Unstimulated saliva was used to assess salivary IL-6 levels using Diaclone human IL-6 ELISA kit and data obtained was analyzed. **RESULTS**: Out of the 76 participants, 59(77.6%) were females and 17(22.4%) were males. Mild stress was perceived by 9 students, moderate and severe stress by 53 and 14 students respectively. Based on Kruskal-Wallis p test, in all grades of stress, approach method of coping had a higher score. Approach is form of active coping strategy where the students deal with the stressor in order to solve the issue and plan for the future. Approach coping has shown better responses for adversity, physical health and emotional responsiveness. Most commonly used coping strategies in mild and medium stress was acceptance, positive-refrain and planning. Students with severe stress adopted planning, self-distraction and self-blame. In spite of the perceived stress, there was no significant difference in the salivary IL-6 levels among the three categories. **CONCLUSION**: The common coping strategies employed by students to handle stress was 'approach'. As described in the BriefCOPE, it has been shown to be associated with better outcomes. In spite of this, a vast number of students have reported to experience stress. Therefore, more effective coping strategies are needed to handle stress and demands of the profession. The study also emphasizes on need for further research with a large sample size to assess the relation between salivary IL-6 and stress levels.
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Table. Responses to BRIEF COPE Questionnaire.

		Mild stress (n=9) mean± SD	Moderate stress (n=53) Mean± SD	Severe stress(n=14) Mean± SD	Kruskal-Wallis test p value
Avoidant		21.11±5.09	23.98±4.57	30.50±4.67	<0.001
a.	Denial	4.11±1.05	4.04±0.88	4.79±0.89	0.026
b.	Substance abuse	2.67±1.32	2.45±0.91	2.64±1.45	0.759
c.	Venting	3.00±1.12	4.26±1.42	5.57±1.50	<0.001
d.	Behavior disengagement	3.00±1.41	3.53±1.35	4.86±1.70	0.004
e.	Self-distraction	4.89 ± 2.15	5.21±1.41	6.36±1.50	0.029
f.	Self-blame	3.44±1.67	4.49±1.59	6.29±2.20	<0.001
Approach		30.22±5.36	30.30±6.01	34.93±5.85	0.035
a.	Positive refrain	5.67±1.12	5.70±1.64	5.86±2.03	0.945
b.	Planning	5.56±1.51	5.51±1.55	6.50±1.51	0.104
c.	Acceptance	6.11±1.54	5.51±1.65	6.21±1.67	0.272
d.	Emotional support	4.44±1.01	4.81±1.73	5.07±1.94	0.693
e.	Use of instrumental support	4.33±1.50	4.49±1.44	6.07±1.49	0.002
f.	Active	4.11±1.36	4.28±1.28	5.21±0.80	0.032
Humor		4.11±1.90	4.51±1.93	6.21±1.76	0.008
Religion		5.11±1.27	4.89±1.87	5.36±2.10	0.689

Key words: Stress; Coping Strategies; Medical Students; IL-6 levels (Source: MeSH-NLM).

Abstracts

76. **BREATHLESSNESS IN THE MISSISSIPPI RIVER VALLEY: TREATMENT RESISTANT SEVERE PULMONARY BLASTOMYCOSIS IN AN IMMUNOCOMPETENT MALE**

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BACKGROUND: Blastomycosis commonly presents as a respiratory infection and is endemic to the Mississippi River Valley that causes severe infections in immunocompromised individuals. Here we present a case of an immunocompetent patient with severe pulmonary blastomycosis. **THE CASE**: A 20-year-old male with a history of childhood asthma with worsening cough, sputum production, shortness of breath, left sided neck mass and 40 lb weight loss over 2.5 weeks. Previously diagnosed with pneumonia 2 months prior and treated with levofloxacin and amoxicillin. Failure to improve led to hospitalization and discovery of a cavitary lung lesion. He was started on vancomycin, meropenem, azithromycin, and anidulafungin. Following discharge, outpatient CT imaging showed worsening lung lesions. At this time itraconazole was started due to high suspicion of blastomycosis. He worsened, requiring home oxygen and came to our hospital for further evaluation. On presentation, he was febrile and tachycardia to 139 with physical exam notable for decreased breath sounds and a large palpable mass under his left mandible. Pertinent labs included leukocytosis to 30.9/cmm with a left shift. Repeat imaging found severe peribronchovascular consolidations worse in the left upper lobe. Infectious disease was consulted and initiated amphotericin B due to poor response to itraconazole and possible disseminated disease. Treatment included 10-days of amphotericin B followed by 6-12 months of itraconazole. **CONCLUSION**: Disseminated Blastomyces infection in immunocompetent hosts is exceedingly rare. Targeted therapy was started 6 weeks following symptom onset and we suspect that delays in diagnosis due to being in rural Mississippi contributed to disease progression.

Key words: Blastomyces, Immunocompetence (Source: MeSH-NLM).