



المؤتمر العلمي السادس

لجامعة 21 سبتمبر - كلية الطب

THE SIXTH SCIENTIFIC CONFERENCE
OF 21 SEPTEMBER UNIVERSITY -
FACULTY OF MEDICINE

الثاني لمناقشة بحوث

تخرج طلاب - الدفعة الثانية

THE SECOND ONE FOR HOLDING
VIVA VOCE PRESENTATION OF
GRADUATION PROJECTS OF
2ND BATCH



بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

برعاية فخامة المشير الركن
مهدي محمد المشاط

رئيس المجلس السياسي الأعلى

تحت شعار (النهضة الصحية تصنعها البحوث العلمية)
تقيم كلية الطب بجامعة 21 سبتمبر للعلوم الطبية والتطبيقية

المؤتمر العلمي السادس لجامعة 21 سبتمبر - كلية الطب
الثاني لمناقشة بحوث تخرج طلاب الدفعة الثانية 1446 هـ - 2025 م





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THE SECOND ONE FOR HOLDING VIVA VOCE PRESENTATION OF GRADUATION PROJECTS OF 2ND BATCH 1446 - 2025**



السَّيِّدُ عَبْدُكَ بِدَارِ الدِّينِ الْحَقِّ



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وزير التربية و التعليم العالي والبحث العلمي



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وزير الصحة والبيئة

بسم الله الرحمن الرحيم

“يرفع الله الذين آمنوا منكم والذين أوتوا العلم درجات” صدق الله العظيم.

يسعدني في البداية أن أرحب بكم في رحاب جامعة 21 سبتمبر للعلوم الطبية والتطبيقية في هذا الحدث العظيم المؤتمر السادس لجامعة ٢١ سبتمبر كلية الطب والثاني لمناقشة بحوث تخرج طلاب الدفعة الثانية 1446 هـ حيث سيتم مناقشة ٤٢ بحث علمي طبي .

يطيب لي أن أتقدم بأصدق الأمنيات لكم بالنجاح والتوفيق في هذا المؤتمر الهام، وأن تحققوا أهدافه السامية، وتستمتعوا بأنشطته المختلفة و اود ان اشكر منتسبي الجامعة بدأ برئيس الجامعة د. مجاهد معصار ود. سلوى الغميري عميد الكلية و النواب و العاملين و الطلاب جميعا على جهودهم و ماثرتهم يعد هذا المؤتمر حدثاً علمياً بالغ الأهمية، في وقت يتطلب فيه التعليم الطبي التفاعل المستمر مع آخر المستجدات المعرفية والمنهجية. لقد أضحت التعليم الطبي ضرورة ملحة في ظل الانفجار المعرفي الذي يشهده العالم، ويأتي هذا المؤتمر ليركز على التعليم المعزز بالتكنولوجيا والاعتماد الدولي، ويجمع بين النظرية والتطبيق في هذا المجال. نلتقي اليوم في هذا الحدث العلمي الكبير، الذي يأتي تماشياً مع التوجيهات الحكيمة لقائد الثورة، حفظه الله، في دعم وتعزيز التعليم الطبي والرعاية الصحية للمواطنين. إن جامعة 21 سبتمبر للعلوم الطبية والتطبيقية قد أصبحت، بفضل الله أولاً، ثم الجهود المبذولة من قيادة الجامعة وكوادرها، منارة للعلم والتطوير في مجال التعليم الطبي، وتقدم بذلك إسهاماً كبيراً في النهوض بالقطاع الصحي.

إن البحث العلمي والابتكار هما الركيزتان الأساسيتان لتحقيق التطور في جميع مجالات الطب، وخاصة في تحسين رعاية المرضى. إن تعزيز التعليم الطبي وتوفير البيئة الأكاديمية المناسبة للبحث العلمي يساهم في تطوير مهارات الكوادر الطبية و يتيح لهم فرصاً كبيرة للنمو المهني. ونحن على يقين أن جيلكم الواعد قادر على مواجهة التحديات المستقبلية وتحقيق إنجازات عظيمة في هذا المجال الحيوي.

إن التعليم الصحي هو إحدى أولوياتنا الأساسية، والنجاح في هذا المجال يعد محورياً لرفع مكانة وطننا وتحقيق استقرار مجتمعا. ولقد أثبتنا قدرتنا على التكيف والنهوض رغم كل التحديات، بفضل جهود كوادرنا الوطنية. ونحن ماضون في مساعيها لتطوير التعليم الطبي، بدءاً من تطبيق المعايير الدولية وصولاً إلى تطوير البرامج الأكاديمية التي تلبي احتياجات المستقبل.

وفي ختام كلمتي، أتوجه بالشكر لله تبارك وتعالى على نعمة العلم والرعاية، وأدعو أن يوفقنا جميعاً لتحقيق أهداف هذا المؤتمر ويساهم في تعزيز مكانة وطننا في مجال التعليم الطبي. كما نسأل الله أن يحفظ قائد الثورة السيد عبد الملك بن بدر الدين الحوثي، وأن يديم علينا نعمة الأمن والاستقرار و لا ننسى في هذا المقام اخوتنا في غزة و ما يتعرضون له من حصار و ابادة و ندعو لهم بالثبات و الصبر و النصر و نؤكد لهم انهم ليسوا و حدهم فنحن معهم. نسأل الله أن يوفقنا جميعاً لما فيه خير وطننا الغالي وصحة مواطنينا.

حفظكم الله ورعاكم، وسدد خطاكم، وجعل النجاح حليفكم في كل مساعيكم



أ.د/ مجاهد علي معصار

رئيس جامعة 21 سبتمبر

بسم الله الرحمن الرحيم

الحمد لله الذي علم الإنسان ما لم يعلم، والصلاة والسلام على سيدنا محمد، معلم البشرية، وعلى آله وصحبه أجمعين.

إننا وفي هذا المرحلة التي يفتخر و يعتز كل يماني بالعزة والكرامة والمكانة التي وصل إليها شعبنا اليمني، ورغم ما نعيشه من واقع يدمي القلب نتيجة ما يحصل في فلسطين وغزة ، وتعرض بلدنا لعدوان همجي غربي على خلفية الوقوف الأسطوري لشعبنا اليمني نصره لغزة العزة ، إلا أنه يحق لنا أن نتباهى اليوم بإقامة هذا المؤتمر المبارك في نسخته الثانية لمناقشة أبحاث تخرج طلاب كلية الطب والسادس لجامعة ٢١ سبتمبر وذلك بعد عام ونيف من النجاح الباهر والذي تكلل بتخريج طلاب الدفعة الأولى ..

و باعتبارها المؤتمر منصة حيوية لخدمة المسيرة التعليمية ورفدا للوسط الطبي والعلمي ، فإن هذا الحدث السنوي يعد أحد الإضافات النوعية المهمة التي تسهم في رفع مستوى التعليم والبحث العلمي ، إذ نجتمع اليوم لتكريم الجهود العلمية وإبراز ثمار العطاء والتفاني من قبل طلبتنا الأعزاء ومن ورائهم نخبة من أكفأ أعضاء هيئة التدريس الكرام ..

إن جامعة 21 سبتمبر تسعى منذ تأسيسها إلى تعزيز البحث العلمي كركيزة أساسية للتعليم العالي والتنمية المستدامة، وإلى إعداد كوادر طبية متميزة قادرة على الإسهام الفاعل في تحسين وتطوير وتحديث النظام الصحي وخدمة المجتمع. وما هذا المؤتمر إلا دليل حي على المضي نحو تحقيق هذه الرؤية، حيث يعكس المستوى العلمي الرفيع لبحوث الطلبة، وجهودهم في تقديم حلول علمية مبتكرة للتحديات التي يواجهها القطاع الطبي في بلادنا.

أشكر جميع القائمين على هذا المؤتمر، من أعضاء اللجان التنظيمية والعلمية، والباحثين المشاركين، والطلبة الذين بذلوا قصارى جهدهم لتحقيق هذا الإنجاز. وأدعو الله أن يوفقنا جميعًا لخدمة بلدنا وأن يوفقنا لما فيه الخير والصلاح، وأن تكون هذه الجهود لبنة جديدة في بناء مستقبل مشرق لوطننا الحبيب.



أ.د/ سلوى الغميري

عميد الكلية

بسم الله الرحمن الرحيم

(يرفع الله الذين آمنوا منكم والذين أوتوا العلم درجات) صدق الله العظيم .

بعد الصلاة والسلام على سيدنا محمد وعلى آله وسلم ،، من الجميل أن نقف اليوم في المحطة البحثية في نسختها الثانية لمناقشة أبحاث تخرج طلاب الدفعة الثانية

هذه الدفعة التي تميزت بالإصرار والمتابعة والتحصيل بكفاءة وقدرات استثنائية من جميع أطباء وطبيبات المستقبل. انني سعيدة سعادة بالغه حيث أننا اليوم في المؤتمر السادس لجامعة ٢١ سبتمبر والثاني لمناقشة أبحاث تخرج طلاب كلية الطب تحت شعار (النهضة الصحية يصنعها البحوث الطبية)

ها نحن اليوم وبفضل الله نجني بعض ثمار جامعتنا الحبيبة وثمار أهدافها التي وضعناها نصب أعيننا ، ورغم تأسيسها حديثاً ، الا ان جامعتنا وبفضل الله تزداد مع الأيام ثباتاً ونجاحاً وتميز ، وذلك من خلال حرصها على خلق بيئة أكاديمية تعليمية متميزة ، وسعيها الدؤوب للتطور والرقى وقدرتها على التأقلم والاستجابة لكل المتغيرات ، ووضع منهجية وخطط واستراتيجيات متعددة الأوجه يجري لها التخطيط جيداً على مدار الأيام ، ليتكامل بذلك إعداد دفعة جديدة متميزة من أبنائها وبناتها ، حاصدين سنوات من الجهد والاجتهاد والمثابرة ، دفعة جديدة قادرة و متمكنة لخدمة الوطن والمواطنين ، متسلحين بأدواتهم العلمية والمعرفية والخبرات التي راكموها واكتسبوها خلال سنين دراستهم في افضل مستشفيات اليمن ..

هذه البحوثات تم أنجازها تحت إشراف نخبة من الاستشاريين والأخصائيين والباحثين بمهنية عالية.

من المفرح أيضاً بإننا بعد عام من الآن سنرفد الوسط الطبي أكثر من خمسمائه طبيب وطبيبه وبعد مرحله الامتياز بإذن الله بعد أن أرسلنا هذا العام المنصرم أكثر من خمسمائه طبيب وطبيبه من أطباء الدفعة الاولى الذين أنجزوا مرحله الامتياز بالتزام وحرص بأخر محطه للتدريب وبهذا السياق نتمنى للدفعة الثانية التوفيق والسداد في مرحله الامتياز. والمراحل التالية فالأفق مفتوحه لكم وعليكم أن تتطلعوا للأختصاصات الطبية المميزة لكي تقدموا رعايتكم لمرضاكم بكفاءة واقتدار.

تحية تقدير لرئيس الجامعة ونوابه الكرام وايضا نواب عميد كلية الطب ورؤساء وأعضاء اللجان العلمية والتحضيرية للمؤتمر وطلاب وطالبات الدفعة الثانية على ما وصلوا إليه من مستويات علمية وبحثية وتدرسية الذي كانت نتائجه هذا الحدث العلمي الطبي الكبير.

والله الموفق،،،،

أهداف المؤتمر

- 1 - توفير منصة للطلاب لعرض ومناقشة أبحاثهم العلمية، مما يساهم في تطوير مهاراتهم البحثية والأكاديمية.
- 2 - تشجيع الطلاب وأعضاء هيئة التدريس على الانخراط في الأنشطة البحثية، بما يساهم في تطوير المعرفة الطبية والتطبيقية.
- 3 - إتاحة الفرصة للتواصل بين الطلاب، الأكاديميين، والمهنيين في المجال الطبي لتبادل الأفكار والخبرات.
- 4 - عرض أحدث الأبحاث والابتكارات في مجال الطب والجراحة، مما يساهم في تحسين الخدمات الصحية.
- 5 - بناء جسور تواصل مع المؤسسات الصحية والمستشفيات لتعزيز التعاون المشترك.
- 6 - قياس مدى تحقيق الأهداف التعليمية والتدريبية للبرنامج الأكاديمي من خلال جودة الأبحاث المقدمة.
- 7 - تحفيز الطلاب على التفكير النقدي والإبداعي لإيجاد حلول للمشكلات الصحية المعاصرة.
- 8 - تعزيز السمعة الأكاديمية للجامعة من خلال إبراز دور الجامعة في دعم البحث العلمي والتميز الأكاديمي على المستويين المحلي والدولي.
- 9 - نشر الأبحاث العلمية في مجلة الجامعة او اي مجلة علمية وانشاء قاعدة بيانات الكترونية





أبحاث الطلاب

Student Researches

1446 هـ

Pattern of Presentation and Outcome of Surgical Management of Glaucoma at Magrebi Eyes Hospital, Sana'a City, Yemen

Background: Glaucoma is major cause that threatening vision and leading to irreversible blindness. Unfortunately, the outlines of glaucoma have not been well characterized and studied in Yemen.

Objective: To assess the pattern of presentation and outcome of surgical management of glaucoma who underwent surgical intervention at Magrebi eyes Hospital, Sana'a Yemen.

Methodology: A retrospective hospital-based study was undertaken of all medical records for all patients more than 18 years old diagnosed as glaucoma and had glaucoma surgical intervention between period from 1/1/2019 to 31/12/2023 at Magrebi Eyes Hospital, Sana'a City, Yemen.

Results: 211 patients (252 eyes) diagnosed with glaucoma and underwent glaucoma surgical interventions. The mean age of the patients was 52.89 ± 16.53 SD years old. The female vs. male was 51.2 vs. 49.8%. Gonioscopically, open angle glaucoma was the most predominant glaucoma subtype 71.8%. Adult-onset glaucoma was 80.6% and 19.4% was younger than 40 years old. According to etiology, primary glaucoma 57.9% and 42.1% secondary glaucoma. The predominant type of glaucoma and subtype of open glaucoma was primary open angle glaucoma 40.1%, Pseudo exfoliation and neovascular glaucoma are the most subtypes of secondary glaucoma in Yemen, 11.9%. The most glaucoma surgery was combined trabeculectomy and phacoemulsification plus MMC 41.3%. Trabeculectomy plus MMC was the second surgical pattern 25%, and glaucoma drainage device 14.3%. The mean duration of follow up after surgical operation was 15.1 ± 6.9 SD months. Statistically significant improvement of postoperative unilateral blindness from 38.5% to 13.1%, $p < 0.001$. The postoperative mean glaucoma medication reduced from 3 ± 0.99 SD to 1.5 ± 1.04 and mean IOP decreased from 31.5 ± 9.7 SD to 16.16 ± 5.96 at the final follow up; $p < 0.001$; $z = -12.327$ and $p < 0.001$; $z = -13.328$. The success rate was 93.7%.

Conclusion: Glaucoma is slightly predominant in female than male. The primary open angle glaucoma was the most common type in Yemen. Pseudo exfoliation and neovascular glaucoma are the most subtypes of secondary glaucoma in Yemen. Glaucoma surgery has high success rate in Yemen with a statistically significant improvement of postoperative best corrected distance visual acuity, mean number of glaucoma medication and mean IOP. However, the most surgical operation that had high surgical failure was combined AVG and phacoemulsification and the indication was neovascular glaucoma closed type

Recommendation : Further researches to continue our effort to cover other eye's hospital to evaluate pattern of presentation and outcome of surgical management of glaucoma. Raising public awareness about the glaucoma disease .

Researchers

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Prevalence, Knowledge, Attitude, Practices and Psychological Impact of Acne Vulgaris among Medical Students at University of 21 September, Sana'a- Yemen 2023.

Background: Acne is a persistent inflammatory condition of the pilosebaceous unit, marked by seborrhea, comedones, papules, pustules, nodules, and cysts. It commonly affects individuals in their adolescent years. Numerous myths and misunderstandings exist among both patients and healthcare providers concerning the origins and management of acne.

Aim Of The Study: This Study aims to Prevalence, Knowledge, Attitude, Practices and Psychological Impact of Acne Vulgaris among Medical Students at University of 21 September, Sana'a- Yemen 2023.

Methods: This study is a descriptive cross-sectional among medical students at 21 September university. A total of 404 participated according to inclusion and exclusion criteria, then data was collected through using self-administered written questionnaire which contain closed -ended questions, modified questionnaires. A questionnaire has 6 parts (Personal characteristics, Knowledge, attitude, practice, psychological impaction and characteristic of students who surfing from acne vulgaris).

Results: The sample consisted of 51% female, the mean age was $23.58(\pm 2.30)$ and 40% of them were in the fifth year of study. 58% of medical students had good knowledge, 57% had positive attitude, 41% had poor practice regarding acne vulgaris, and there was a strong positive correlation between knowledge, attitude and practice in this study. 47% of medical students had affected by acne mostly in the face and neck. Around one third of students developed depression because of acne, especially female students, 20% of them affected their relationship and 16% affected their study and job performance.

Conclusion: Acne vulgaris is a condition that can be managed but not permanently cured. It is essential to enhance the understanding of dermatology among medical students as education plays a crucial role in the care of patients

Researchers

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Patterns and Determinants of Blood and Blood Products Transfusion in Neonates at Al Sabeen Hospital in Sana'a City, Yemen (Sep. 2022-Aug. 2023)

Introduction: Blood transfusion among neonates is a growing area of concern, as it is a critical treatment for newborns. Yet, guidelines for transfusion thresholds which vary widely across countries influenced by geographical, racial, as well as medical conditions and treatment methods.

Aim of the Study: This study aims to identify the patterns and clinical determinants for blood and blood derivatives transfusion in neonates at Al-Sabeen Hospital in Sana'a, Yemen.

Methods and Materials: This descriptive cross-sectional study utilized data extracted from medical records of 2,616 neonates admitted to Al-Sabeen Hospital in Sana'a, Yemen, between September 1, 2022, and August 31, 2023. It focused on demographics, transfusion indications, and outcomes of the 493 neonates who received blood products. Data was analyzed using SPSS version 26, with results presented in tables and charts. Ethical approval was obtained, and patient confidentiality was maintained.

Results: The prevalence rate of blood transfusion among neonates was 18.8% (n = 493), out of which (74.2%) were males and (63%) had low birth weights. Most cases (49.5%) received a transfusion within the first week of life. More than half of the neonates suffered from lethargy/malnutrition at a rate of (52.6%), followed by jaundice (47.7%) as the main clinical manifestations. The results showed that platelets were the most commonly used blood product at a rate of (79.7%), while packed red blood cells were the second most common blood product (53.9%). Even though the majority of blood products were given once, many neonates received more than one blood product. Bacterial sepsis was the most common cause of transfusion, as (74%) had sepsis, followed by cardiopulmonary disorders (38%) among other indications found in this study. The improvement rate in these newborns was (73.2%), while approximately (14.4%) of the cases died despite treatment.

Conclusion: This study reveals a high prevalence of blood transfusion among newborns, with one in five hospitalized newborns requiring this intervention. Platelets were the most frequently transfused product for newborns, a fact that appears to contradict the results of other studies conducted in different countries. Despite the improvement in most cases, the significant death rate observed highlights the importance of efforts to improve the quality of neonatal care and support infrastructure to prevent sepsis and preterm labor, which were found to be common causes for transfusion, in order to reduce the need for blood transfusion in neonatal units.

Recommendations: The study recommends developing effective policies to reduce the need for blood transfusions by enhancing the prevention of bacterial sepsis and improving maternal and neonatal health. It emphasizes the importance of establishing standardized guidelines for neonatal blood transfusions in Yemen to ensure safe and high-quality practices. The recommendations also highlight the necessity of ensuring an adequate supply of blood and its derivatives to meet patient needs. Caution is advised when using platelet-suppressing medications like vancomycin, with regular monitoring. Additionally, the study stresses maintaining medical records to support research and conducting long-term studies to evaluate transfusion outcomes and monitor laboratory changes in neonates.

Researchers

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Job Satisfaction and Migration Intentions Among Physicians Working at Hospitals in Sana'a, Yemen

Introduction: Job satisfaction is a critical factor influencing workers' health and often determines the productivity and efficiency of human resources for health. It is directly related to the quality of care and affects physicians' intentions to migrate worldwide. In Yemen, the shortage of doctors has become a pressing concern, with low job satisfaction being a significant factor influencing migration intentions.

Objective: This study aimed to evaluate the extent of job satisfaction and the intentions to migrate among Yemeni physicians working in public and private hospitals in the capital, Sana'a.

Methods: A hospital-based cross-sectional analytic study was conducted. Data were collected using a structured questionnaire and analyzed using the Statistical Package for the Social Sciences (SPSS) software, version 26. Descriptive statistics were used to describe socio-demographics, job satisfaction levels, migration intentions, and reasons for migration. Data were presented using frequencies, percentages, means, standard deviations (SD), and medians in tables and figures. The average median was used to determine the level of job satisfaction. The Chi-square test was applied to assess the association between job satisfaction and migration intentions, with a significance level of $p < 0.05$.

Results: Among 350 physicians, 52% were dissatisfied with their jobs, while 48% were satisfied. Additionally, 77.4% expressed intentions to migrate, while 22.6% did not. The primary reasons for migration included better educational and training opportunities abroad, improved working conditions, low income in Yemen, limited career progression, a stressful work environment, better work-life balance abroad, lack of employee support, restricted training opportunities, and unclear job descriptions. Job satisfaction was significantly associated with migration intentions ($p < 0.001$). Seven sociodemographic factors were also significantly associated with migration, including being a general physician, single, childless, having shorter work experience, low income, no private clinic, and unsafe work conditions ($p < 0.001$).

Conclusion: Low job satisfaction among physicians is a critical issue, contributing to the increasing migration of healthcare professionals. Future research should explore additional factors, such as policy-makers' roles and health workforce policies, to enhance job satisfaction and mitigate migration among physicians in Yemen.

Keywords: Job satisfaction, immigration, physicians, hospitals Sana'a, Yemen.

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Prevalence of Generalized Anxiety Disorder Among Medical Students in Yemeni Universities - in Sana'a City, Yemen

Background: Generalized anxiety disorder (GAD) is a mental illness characterized by excessive worry and physical symptoms such as sweating and rapid heartbeat. Understanding the prevalence of GAD among college students is critical to addressing the mental health challenges in this population.

Objective: The study aims to evaluate the prevalence of generalized anxiety disorder among medical college students in Yemeni universities - Sanaa 2023.

Methodology: A descriptive cross-sectional study. The Taylor Generalized Anxiety Inventory was used to measure the levels of general anxiety among medical students in Yemeni public and private universities. A structured questionnaire was used to collect data from the sample. The obtained data were analyzed using the Statistical Package for the Social Sciences, version 23. Descriptive statistics were performed to describe the social and demographic variables. Frequencies, percentages, means, and standard deviations were used for the descriptive data; they were presented in tables. The Chi-square test was used to test the differences in the prevalence of anxiety among students in medical science colleges in relation to demographic variables. The test is considered statistically significant at a value of $p < 0.05$.

Results: The sample size was 600 male and female students from the College of Health Sciences, and the percentage of males was 52.2%, which is higher than the percentage of females. The highest age group was those aged 19-23 years at 82%. The sample was divided equally according to the university and scientific department. The highest prevalence of severe anxiety according to demographic data was for females at 21%, and according to colleges, it was students of the Emirates University at 23.40%. The highest group with severe general anxiety according to the department was students of the laboratory department at 25%. The lowest percentage of general anxiety disorders was for boys "no anxiety" at 36.62%, for students of Sana'a University at 36%, and for the Department of Human Medicine at 33.5%. There was a statistical significance between gender and the prevalence rate of general anxiety, while the type of university and specialization were not statistically significant.

Conclusion: In conclusion, the prevalence of general anxiety among students of health sciences colleges is that girls suffer from general anxiety more than boys, and that the prevalence of anxiety among students of private universities is higher than that of public universities, and that the scientific department in which general anxiety is more prevalent is the laboratory specialization. The study recommends providing psychological support services and workshops on mental health, including study materials about it, encouraging research and surveys, promoting social activities and forming support groups for students.

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Mortality Rate among Low-Birth-Weight Infants at Al-Gumhouri Teaching Hospital, Sana'a City, Yemen-2023

Background: Low birth weight (LBW), defined as a birth weight of less than 2500 grams, is a critical determinant of neonatal mortality and morbidity.

The Aim of the Study: The study aims to estimate the mortality rate and its factors among low-birth-weight infants who admitted to Al-Gumhouri Teaching Hospital in Sana'a City, Yemen, and to identify associated factors.

Subjects and methods: A cross-sectional study was conducted from 1st January 2022 to 31st December 2023 at Al-Gumhouri Teaching Hospital, Sana'a City, Yemen. Data were collected by pre-tested structured questionnaire. all live births with 28 weeks of gestation or more with weight less than 2500g admitted to the neonatal intensive care unit. Data validated with Microsoft Excel version 13 and exported to SPSS.27; for statistical analysis which explored for demographic and other clinical characteristics as categorical variables. The mean and standard deviation were established for quantitative variables. The data were obtainable as a frequency distribution and plots were generated for the partial categorical variables, while the mean and standard deviation were for a quantitative variable.

Results: the total were 375 low-birth-weight infants with mortality rate 38.4%, highest among infants born before 36 weeks (66.6%) and those weighing less than 1.5 kg (77.3%), the male more than female (51.5%), delivered vaginally (62.7%), the common cause of death were respiratory distress (43%), prematurity (34%), sepsis (24.3%), asphyxia (20.8%) congenital anomalies (16.7%) jaundice (12.5%) congenital heart disease (6,3%). The mother age group of 19 – 35 years more affected (77.3%) beside (63.7%) of mothers had 2-4 off springs. Mode of delivery showed a slight effect, with 39.1% mortality for vaginal and 37% for cesarean deliveries. There are significant association between neonatal gestational age and weight (P value >0.05).

Conclusion and recommendation: a high mortality rate among LBW infants in Yemen, influenced by factors such as gestational age and birth weight. The findings highlight the urgent need for targeted interventions to reduce the incidence of LBW by focusing on enhancing maternal education, encouragement the antenatal care.

Keywords: Low birth weight, neonatal mortality, Yemen, Sana'a

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Diagnostic Imaging of Duplex Ultrasound Compared to Multi Detector CT Angiography in Patients with Chronic Lower Limb Ischemia

Background: Chronic lower limb ischemia is a widely spread disease at the present time. It is a progressive disease and mainly comprises of atherosclerosis and Buerger's disease. It is defined not only by the clinical presentation but also by an objective measurement of impaired blood flow using radiological investigations like Doppler Ultrasonography (DUS) or Multidetector computed tomography angiography (MDCT)

The Aim of the Study: This study aimed to evaluate the role of DUS in comparison with MDCT in the assessment of lower limb ischemia.

Methodology: A cross-sectional study was involved 70 patients suffering from Chronic lower limb ischemia, was performed in the period of September and October 2023 at Vascular surgery clinic, in Sanaa city, and the data collection from Patient's medical records and Statistical analysis by using SPSS program

Results: The agreement between DUS and CTA findings was expressed as a Cohen's kappa() statistic agreement. Our results show that DUS has been less accurate than CTA in evaluating lower limb arterial diseases (Infrarenal aorta [0.10], Common iliac artery [0.16], Internal iliac artery [0], External iliac artery [0.45], Common femoral artery [0.34], Superficial femoral artery- prox [0.31], Superficial femoral artery-mid [0.44], Superficial femoral artery-distal [0.57], Deep femoral artery [0], Popliteal artery [0.48], Anterior tibial artery [0.58], Posterior tibial artery [0.61], Peroneal artery [0.33], Dorsalis pedis [0.36], Profunda femoral artery [0].

Conclusion : Ultrasound is best screening tool, In assessing mild cases who needs medical therapy and in whom the CT is contraindicated, ultrasound is the better imaging modality. In patients with moderate to severe cases and in whom surgical intervention is required, CTA is preferred for thorough evaluation of entire lower limb arterial tree.

Recommendations: Radiologists should utilize modern, high-resolution imaging technology to enhance detection accuracy and minimize errors. Healthcare providers should educate patients about the disease, its implications, and preventive measures to promote awareness and empowerment. Conduct comprehensive studies in Sana'a and other governorates to advance understanding, diagnosis, and treatment of CLLI, informing evidence-based practices.

Keywords: Chronic lower limb ischemia, Doppler Ultrasonography, Multidetector computed tomography angiography

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Assessment of Nurses Knowledge about Preventive and Therapeutic Measures of Postpartum Hemorrhage in Government Hospitals, Sana'a city 2023.

Background: Postpartum hemorrhage (PPH) is a significant cause of maternal morbidity and mortality worldwide. Adequate knowledge among healthcare providers plays a crucial role in the prevention and management of PPH. This study aimed to assess the knowledge levels of nurses regarding PPH and identify factors influencing their knowledge.

Methods: A cross-sectional study was conducted, involving 123 female nurses working in the delivery department of three governmental hospital during the period from 11 November 2023 to 11 January 2024. Socio-demographic characteristics, training courses, knowledge questions were collected. Knowledge levels were assessed using a questionnaire. Tables, figures, plots used to present the results. Univariate and multivariate statistical analyses were performed to determine associations and predictors of knowledge.

Results: The average knowledge score for PPH prevention and management was 71.2%. the average knowledge for management (69%) was lower than the prevention domain (74%). The majority of nurses (67.5%) were aged 20-30, with a diploma-level education, and worked as delivery room nurses (82.1%). Most nurses had less than 2 years of experience (52.8%), while a significant proportion (29.3%) had more than five years of experience. Regarding training courses, 38.2% of respondents had participated in three or fewer pregnancy-related courses, and 41.5% had received specific training on PPH. Significant associations were found between knowledge levels and various factors. Older age ($p = 0.023$), employment status ($p = 0.045$), more years of experience ($p = <0.001$), and a higher number of PPH training courses ($p = <0.001$) were associated with higher knowledge scores.

Conclusion: The study reveals moderate knowledge levels among nurses regarding PPH prevention and management. Targeted educational interventions should focus on specific areas that scored lower in the assessment. Encouraging practical experience, increasing the availability of PPH training courses, and further research to explore additional influencing factors are recommended to enhance nurses' PPH knowledge

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Indications of Cesarean Section Deliveries among Mothers in Al-Sabeen Hospital - Sana'a, 2023-2024

Background: Cesarean section is one of the common surgical operations in obstetrics and is certainly one of the oldest surgical operations, and its importance comes from the fact that it secures the life of the mother and child.

Objectives: To determine the indications of cesarean section among Yemeni mothers in Al-Sabeen Hospital.

Methodology: This study was conducted on women who underwent cesarean section in Al-Sabeen Hospital during the period from September 2023 to March 2024. Data were collected through pre-defined questionnaires. The collected data were analyzed by the Statistical Package for Social Sciences (SPSS) version 22.

Results: The study included 500 cesarean section cases, 77% of whom were urban, 53.8% had undergone cesarean sections before, 36.6% of cases had pre-eclampsia during pregnancy; 23.4% of them had bleeding, 16% had prolonged labor, and 11.6% had placenta previa.

Conclusion: The cesarean section rate was significantly higher among urban women reaching 77%. The first indication of cesarean section was previous cesarean section, followed by pre-eclampsia, hemorrhage, prolonged labor, and placenta previa, respectively.

Keywords: Cesarean section; indications of cesarean; Sana'a, Yemen.

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Hyperglycemia During Induction Phase Chemotherapy in Childhood Acute Lymphocytic Leukemia

Background: Acute lymphocytic leukemia (ALL) is the most common pediatric cancer and the leading type of leukemia in children. Hyperglycemia is a frequent complication during the remission induction phase of ALL treatment, primarily caused by corticosteroids and L Asparaginase. It affects a significant proportion of children, leading to complications such as diabetic ketoacidosis (DKA), increased infection risk, prolonged hospitalization, chemotherapy delays, and decreased rate of complete remission. Risk factors include older age, Down syndrome, obesity, High-Risk ALL classification, and high white blood cell (WBC) count at diagnosis.

Objective: This study examined the prevalence, risk factors, timing, and outcomes of hyperglycemia in pediatric ALL patients during the induction phase of chemotherapy.

Methods: A retrospective study of 331 children with ALL at the Pediatric Leukemia Center, Al-Kuwait University Hospital, Sana'a, Yemen (2020–2023). Hyperglycemia was defined as a blood glucose level ≥ 200 mg/dL (twice, ≥ 24 hours apart). Statistical analysis was performed using SPSS and R, including descriptive statistics, univariate and multivariate binary logistic regression for risk factors, Chi-Square for the risk factors of insulin use, and Mann-Whitney U test for outcomes.

Results: Among the sample, 26% of patients were aged ≥ 10 years, 55% were males, and 21.5% had B-ALL. The majority of patients (49%) were underweight, while 4.2% were overweight/obese. Hyperglycemia occurred in 9.1% of the patients. Univariate analysis identified older age (≥ 10 years), high WBC count ($\geq 50 \times 10^9/L$), High-Risk ALL, and Down Syndrome as significant predictors of hyperglycemia. However, multivariate analysis revealed that only older age and high WBC count remained significant, with High-Risk ALL excluded due to collinearity. Of the five patients with Down syndrome, two developed hyperglycemia (40%), but it was not significant in the multivariate model, likely due to low prevalence. Hyperglycemia episodes were most commonly triggered after Prednisolone (33.3%) and the first L-Asparaginase session (23.3%). Hyperglycemia was severe and required insulin in 53.3% of patients and was associated with life-threatening DKA (10%), dose reduction (16.7%), and treatment cancellations (6.6%). Patients with hyperglycemia had longer treatment durations. Older age was linked to severe hyperglycemia requiring insulin.

Conclusion: This study emphasizes the importance of vigilant glucose monitoring and timely intervention in pediatric ALL patients to mitigate adverse outcomes. Standardized protocols for hyperglycemia management are crucial, and replacing L-Asparaginase with PEG-asparaginase is recommended. Further research is needed to explore the underlying mechanisms and develop targeted prevention strategies.

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Prevalence Of Cataract and Associated Risk Factors among Ophthalmic Outpatients at Sana'a Hospitals

Background: Cataracts, commonly characterized by the clouding of the eye's natural lens, are a leading cause of visual impairment and blindness worldwide. Estimates by WHO indicated that 94 million people worldwide had visual disability due to cataract. Cataract is the leading cause of blindness all over the world, responsible for 45.4% of blindness and accounting for 15.2 million blind people. The majority of cataract-induced blindness occurred in developing countries, accounting for up to 90% of cases.

Objectives: The aim of this study was to assess the prevalence of cataracts and associated risk factors among ophthalmic outpatients at Sana'a hospitals.

Methods: A hospital-based cross-sectional study was conducted among patients attending Al Jomhori, Ibn Alhaytham, and Al Thawrah hospitals. Samples were collected using pretested structured questionnaires and ophthalmic examinations. Data analysis was performed using the Statistical Package for the Social Sciences (SPSS) program.

Results: A total of 1,616 subjects were included in the study. Among them, four hundred forty-five patients (27.8%) were diagnosed with cataracts (55.3% male, 44.7% female). The age of patients ranged from less than one year to over 60 years, with the majority (54.2%) being above 60 years of age. Most patients were from rural areas (67.6%), and senile cataracts accounted for (78.2%) of cases. Hypertension was present in (24.7%) of patients, while (22.2%) had diabetes, (20.4%) used steroids, and (18.7%) had a family history of cataracts.

Conclusion: The prevalence of cataracts was estimated to be more than a quarter of our sample, with an increasing trend associated with age. Our findings further support the association of hypertension, diabetes, steroid use, and family history as frequent risk factors for cataracts.

Key words: cataract, prevalence, risk factors

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Assessment of Anti-Streptolysin O Level in Patients with and without Rheumatic Heart Disease in Sana'a City, Yemen.

Background: Group A streptococcus (GAS) is a common bacteria that can cause illnesses ranging from mild to severe. While most GAS pharyngitis (strep throat) cases result in minor illness, a small percentage can lead to serious complications like ARF, and RHD. Antistreptolysin O (ASO) is an antibody produced in response to GAS infection, and ASO levels vary based on factors such as age, location, season, and population. A 2010 Yemen study found a high prevalence of RHD, indicating it remains a significant public health issue in that region. Regular screening and treatment of GAS infections can help reduce complications.

Aim of the Study: This study aims to assess the level of ASO in patients with Rheumatic Heart Disease and those without Rheumatic Heart Disease in Sana'a City, Yemen in 2021-2022.

Methodology: A retrospective hospital record-based study was conducted at the University of Science and Technology Hospital in Sana'a City, Yemen. The study period spans from January 1, 2021, to December 31, 2022. The study population includes patients of all ages who visited the cardiology clinic or were admitted to the cardiology ward in the selected hospital during the study period. Data completeness was ensured before entering the data into the statistical software SPSS for analysis.

Results: Among 470 Patients included in the study, only 89 Patients (18.9%) had RHD based on echocardiography. Among them, only 36 Patients (40%) exhibited elevated ASO levels, indicating ASO is not consistently elevated in RHD. Statistical analysis showed a no significant association between elevated ASO levels and RHD. ASO had moderate specificity but relatively low sensitivity and its negative predictive value is higher than positive predictive value. Notably, about 60% of RHD cases presented with normal ASO levels, and majority (71%) of patients with elevated ASO levels didn't have rheumatic heart disease. This is against the hypothesis of the research that suggests a strong relationship between ASO and RHD. This highlights the limitations in using ASO as a diagnosing tool for RHD.

Conclusions and Recommendations: No significant association between elevated ASO levels and RHD. ASO should not use as a diagnostic tool for RHD.

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Knowledge, Attitudes and Practices among Physicians about Effectiveness of Probiotics in the Prevention of Antibiotic-Associated Diarrhea in Major Governmental Hospitals in Sana'a City, Yemen, 2023

Background: Probiotics have numerous health benefits to the digestive system, one of them being clinically able to prevent and treat diarrhea. The growing scientific evidence of probiotic benefits has led to increased production of probiotic products. Health science students, as future healthcare professionals (HCPs), should have more knowledge about probiotics to be able to give the right recommendation to their patients. This study aims to assess the knowledge, attitude, and practice towards probiotics of physicians in major governmental hospitals, Sana'a City, Yemen.

Methodology: A cross-sectional study was conducted on 514 physicians from major governmental hospitals in 2023. Non random sampling was used to select the study subjects, and a self-administrated questionnaire was used to collect the data. Data were analyzed by using SPSS software version 26.00. Scores of each variable were categorized. Student t test and analysis of variance (ANOVA) was used to analyze the statistical differences among most groups. Pearson correlation coefficient was used to analyze the relationship between knowledge, attitude, and practice variables. Tables and figures were used to present the data.

Results: Among the 514 participants, the level of knowledge scored at 42%, while the average score of attitudes was 73% and the average score of physicians practice was 70%. The Gender of physicians was significantly associated with knowledge ($p=0.011$) and attitude ($p=0.009$), while qualification and years of experience were significantly associated with knowledge and practice. Age variable was significantly associated with only practice domain. The lack of guidelines or recommendation about probiotics was a major barrier to the utilization of probiotics and was most frequently reported by those who had higher levels of knowledge and attitude.

Conclusion: Physicians in Sana'a City showed a low level of overall KAP regarding probiotics. Implementing clear guidelines and recommendations can significantly improve the knowledge, attitudes, and practices of physicians in Sanaa City regarding probiotics. This enhancement is expected to lead to better patient care and outcomes, particularly in preventing AAD.

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Prevalence of Complications & Risk Factors And Causes of Delayed Diabetic Foot Management Among Patients at Al-Thaorah And Al Jomhori Hospitals Sana'a, Yemen

Background: diabetic foot ulcer is a localized injury to the skin and underlying tissue on the foot of a person with diabetes, One of the severe complications of diabetes is Diabetic Foot (DF), Diabetic foot complications pose a significant burden on healthcare systems worldwide, leading to increased morbidity and mortality

The Aim of the Study: The study aimed to assess the Prevalence Complications, identify Risk Factors, causes in Delayed diabetic foot management Among Diabetic Foot Patients attending To Al-Thaorah Hospital and A-Jomhori hospital Sana'a, Yemen.

Subjects and methods: Descriptive, cross-sectional stud ,conducted at the Diabetic Foot Center and outpatient clinics within Al-Thawrah Hospital and Al-Jomhori Hospitals. the study, involved 249 patients male & female aged 20 years and older who have been diagnosed with diabetes mellitus and present with diabetic foot ulcers or complications that have persisted for more than three weeks. Sample size was determined to a specific time ,which was from January 2024 to April 2024 data were collected using a pre-tested structured questionnaire . Additionally, clinical examinations of foot performed to recording the grade of the ulcers and the presence of any complications. Data was entered and analyzed using IBM SPSS Statistics software (edition 26).

Results: This study sheds light on various aspects related to diabetic foot ulcer among diabetic foot patient sample primarily composed of older males from rural areas, mostly unemployed and with poor educational backgrounds, two- thirds of patients age was between 41 – 64 years, duration of diagnosis with DM by the mean year of diagnosis was 14.4 (7.002)around 55% had recurrent observation and 45% had insidious observation of foot ulcer majority of the participants have had diabetes foot ulcer for more than one month (54.6%), with only a small percentage being diagnosed within the past year (24.9%). about (81,1%) of the total sample size, suffering from delay wound healing, around two-thirds of our patients suffered from diabetic complication. (67%) SUFFERING FROM FOOT gangrene, while (69.5%) of them suffering of discharge(infection), 35% they loss sensation in the foot before its affection, 50% they had history of hypertension, 30% they had history of cardiac problem, 45% they had dyslipidemia or hypercholesterolemia and 30% of them were smoker, (50.2%) using oral pills in treatment DM, poorly controlled blood glucose levels with HbA1c More than 7.5 mmol in most of the sample ,with higher percentage of irregular treatment (41%) about participant attitude toward reasons contributed to delaying treatment Our results shows that (34%) of our patients strongly agreed with that the lack of financial resources has affected the delay in treatment procedures for their diabetic foot. ulcer stage 2 was the highest one among patients by 29%, followed by stage 5 by 27%, then stage 4 by 24% and stage 3 by 18% of patients. more than have our patients 53% had negative awareness score only one third of our patients had good quality of life and two thirds had poor quality of life.

Conclusion : Overall, there is high prevalence of foot complication and presence of risks factors among this population more also, findings suggest a complex interplay between delayed diabetic foot management, patient perceptions, disease duration, and the severity of foot ulcers among diabetic patients in Sana'a, Yemen. Addressing these factors through improved education, awareness, and timely interventions is crucial for preventing complications and improving outcomes in this population

Keywords: Diabetic foot, complications, risks factors, delay treatment.

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Evaluation of the Extent and Effect of Psychoeducation and Psychological Support in the Families of Autistic Children at Autistic Centers, Sana'a city, Yemen.

Background: Autism Spectrum Disorder (ASD) affects not only the individual with the diagnosis but also their entire family. Parents and siblings of children with ASD often experience increased stress, anxiety, and depression compared to families of typically developing children. Psychoeducation and psychological support may decrease these negative effects, but the extent and impact of such interventions for families of children with ASD are not well understood.

Objective: The study was conducted to assess the Extent and Effect of Psychoeducation and Psychological Support in the Families of Autistic Children and its contribution to families' knowledge about ASD.

Methodology: A cross-sectional descriptive study conducted in seven autism centers in the city of Sana'a. The study population included families of children who had been diagnosed with autism for at least 6 months and in whom no other psychiatric disorders were found and who visited the centers regularly. Data was collected through face-to-face interviews with 140 families. The data was obtained and analyzed using SPSS. Descriptive statistics were conducted to describe the socio-demographic variables and the extent of the impact of psychological support. Data described by frequencies, percentages, means & SD. Chi square test was used to test differences independent variable in relation with socio-demographic characteristics

Result: The study involved 140 caregivers, with 40% aged 20-30 years, predominantly female (83%), and about a third having a university education. Caregivers had a mean awareness and psychological support score of 69%, with 58.6% having a wide extent of awareness. Acceptance and interaction scored highest (80%), while knowledge about family roles scored lowest (53%). The Impact of family support sessions on caregivers scored an average of 68%. Psychological support sessions had a mean impact score of 58% on autistic children, with positive effects on reducing isolation but mixed results on improving social skills and behavior. The study found correlations between the extent and impact of psychological support, with a wider extent, leading to a stronger impact on both caregivers and autistic children. Stronger impact on caregivers also led to a stronger impact on autistic children. Key factors influencing the extent and impact of psychological support included caregiver gender, educational level, source of information, length of involvement, and child's age at diagnosis and symptom profile. Conclusion: more comprehensive and effective psychological support and psychoeducation provided to the families of autistic children was found to have significant benefits for both the caregivers and the autistic children themselves. This highlights the importance of providing psychoeducational and psychological support services for families with an autistic child

Keywords: Autism spectrum disorder, families of Autistic children, psychoeducation, psychological support, autism intervention

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Prevalence of Vitamin D Deficiency and Associated Risk Factors among People in Sana'a, Yemen

Background: The prevalence of vitamin D deficiency has risen globally, often due to a lack of awareness about its causes and complications. According to WHO, millions are affected yearly, particularly in developing countries like Yemen, where it has become a significant public health issue. Enhancing patient knowledge is crucial for managing and preventing this condition.

Aims:

General Objective: Aim of study is to evaluate the prevalence of vitamin D deficiency and associated risk factors in people in Sana'a city, Yemen.

Methodology: This is an cross sectional study, carried out to Prevalence of Vitamin D Deficiency and Associated Risk Factors in National Center of Public Health Laboratories, at which sample size was determined by a period between October 2023 to October 2024. All Patients are included except those with excluded criteria . The collected data was analyzed by using SPSS 25 edition (Statistical Package for Social Science), program for static analysis.

Results: The study found that the most affected age group was 21–30 years (29.2%), with females (80.2%) and urban residents (77.4%) predominating. Over half of the participants (53.8%) were literate, and the lack of sunlight exposure was identified as the primary risk factor (72.4%). Most participants were nonsmokers (79.8%), and 54% reported poor health. Dietary habits revealed that 37.4% consumed milk infrequently, while 82% occasionally ate fish. Bony pain was the most common symptom, reported by 96.4% of participants. Laboratory investigations showed critically low vitamin D levels (0–10 ng/mL) in 41.3% of cases, with calcium and hemoglobin levels tested in all patients. Oral supplementation was the preferred treatment method (75.8%), and fatigue was the most frequently reported complication (76.4%).

Conclusion: Vitamin D deficiency is common nowadays and with negative practice and bad knowledge among people against such a disease we expect that the prevalence will increase , so we suggest more researches to this topic to find more information about such a topic to reduce its present among patients and the whole community .

Key words: Vitamin D deficiency, risk factors, bony pain, oral supplementation

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Prevalence of Vitamin D Deficiency and Associated Risk Factors among People in Sana'a, Yemen .

Background: The prevalence of vitamin D deficiency has risen globally, often due to a lack of awareness about its causes and complications. According to WHO, millions are affected yearly, particularly in developing countries like Yemen, where it has become a significant public health issue. Enhancing patient knowledge is crucial for managing and preventing this condition.\

Aims:

General Objective: Aim of study is to evaluate the prevalence of vitamin D deficiency and associated risk factors in people in Sana'a city, Yemen.

Methodology: This is an cross sectional study, carried out to Prevalence of Vitamin D Deficiency and Associated Risk Factors in National Center of Public Health Laboratories, at which sample size was determined by a period between October 2023 to October 2024. All Patients are included except those with excluded criteria . The collected data was analyzed by using SPSS 25 edition (Statistical Package for Social Science), program for static analysis.

Results: The study found that the most affected age group was 21–30 years (29.2%), with females (80.2%) and urban residents (77.4%) predominating. Over half of the participants (53.8%) were literate, and the lack of sunlight exposure was identified as the primary risk factor (72.4%). Most participants were nonsmokers (79.8%), and 54% reported poor health. Dietary habits revealed that 37.4% consumed milk infrequently, while 82% occasionally ate fish. Bony pain was the most common symptom, reported by 96.4% of participants. Laboratory investigations showed critically low vitamin D levels (0–10 ng/mL) in 41.3% of cases, with calcium and hemoglobin levels tested in all patients. Oral supplementation was the preferred treatment method (75.8%), and fatigue was the most frequently reported complication (76.4%).

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Complications and Outcomes of Measles in Admitted Pediatric Patients in Main Referral Hospitals, Sana'a City, Yemen ,2023

Background: Measles is a highly communicable viral illness and is a common cause of childhood mortality and morbidity. Recently, the prevalence of measles is increasing back especially in the developing countries. The war in Yemen had affected accessing to healthcare and affected the vaccination program acceptance.

Objective: This study aimed to assess the complications, outcomes and rates of Measles in admitted pediatric patients in main referral hospitals in Sanaa city, Yemen.

Methods: Hospital-based retrospective study, which collected data from pediatric patients in Main referral hospitals from January 2023 to December 2023. The data included all infants and children aged between one month and 15 years. After taking approval from different hospitals, the data was collected from documented files and then coded by Microsoft Excel 2019 and analyzed by using (SPSS) version 28. The comparative results were considered significant where P. value was less than 0.05.

Results: Fifty eight percent of measles patients were male and the most affected age was the age group between one year and two years. Almost all children complained of fever, 93% maculopapular rash, 90% cough and 40% shortness of breath. Pneumonia was the most reported complication by 95% followed by conjunctivitis 73% and gastroenteritis 60%. The mortality rate was around 3.6% and sepsis and cardiopulmonary arrest were the most reasons of death. There was a significant correlation between convulsions, sepsis, encephalitis, renal impairment, blindness and outcome of patients by p. values of 0.048, .000, .002, .000, .000 respectively. The mean hospitalization period was around 4 days, the vaccination rate was only around 25%, and lack of health education was the most reason of non-vaccination.

Conclusion: Measles remains a significant and avoidable burden on healthcare, causing severe complications, hospitalization, and even death. Additional research is required to enhance the prevention and treatment of measles.

Keywords: Measles, Complication, Children, Mortality rate, Yemen, Vaccination.

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Manifestations and Pattern of Acute Coronary Syndrome among Admitted Patients in Cardiac Centers, Sana'a City, Yemen, 2023

Background : Cardiovascular diseases are the leading causes of death All over the world, Studies estimate that cardiovascular diseases cause a third of the world's deaths, at a rate of 31%,. Coronary artery disease that results from atherosclerosis can be presented in several forms, such as stable angina, unstable angina, myocardial infarction, or sudden death.

The aim of this study is to determine the pattern and manifestations of Acute Coronary Syndrome patients admitted to cardiac centers in Al-Thwarah Hospital, Al-Kuwait Hospital Sana'a city during 1st January to 31st December.

Methods: The research conducted as descriptive retrospective analysis study of Acute Coronary Syndrome patients admitted from 1st January 2023 to 31st December 2023 in the cardiac center of the two major referral hospitals in the capital city, Sana'a, Yemen. Data were extracted from the patient cases files. Data validated with Microsoft Excel version 13 and exported to Epi- info version 7.3; for statistical analysis. Data evaluated for demographic and other clinical characteristics as definite variables.

Results: A total 251 cases were enrolled, three quarter of patients' male (73%), The average age was 55 ± 3 years old, about 64% of cases were from Sana'a which is urban, About third (29%) of cases not work, (64%) chewing qat, more than half (56%) of cases are smokers, the typical chest pain was the most common symptoms that patients came with represent about (84%) followed by Shortness of breath 78% and Sweating 73%, The majority of acute coronary syndrome patients had st elevation MI (78.8%) followed by non st elevation MI (19.6%) & (70%) had positive serum troponin, PCI applied for less than half of patient 45%, and for the medical management, Aspirin was the massive drug used by 94%, About half of patient had no surgical intervention (39%), although just (16%) had CABAG.

Conclusion: the majority of patients of ACS had ST elevation type, and chest pain was the most common symptoms, with long period to arrive to hospital more than 30 minutes, PCI was applied for less than half of patient.

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A Study of The Prevalence of Skin Manifestation Among Diabetic Patients Attending Dermatological Outpatient Clinics of Public Hospitals, Sana'a City-Yemen-2023

Background: Skin is the largest organ in the body, and effected by many systemic diseases including diabetes mellitus. Diabetes mellitus effected the skin by different mechanism, that lead to varies manifestations and skin problems, some of them appear on asymptomatic patient and can be the first indictor for the presence of diabetes mellitus and usually go undiagnosed , while others related to the control of diabetes and lead to serious complication which needs control of blood sugar to be treated.

Objective: The study was conducted to determine the prevalence of different skin manifestation on diabetic patients and enhance knowledge regarding their definition, diagnosis, prevention and treatment methods of them.

Methodology: study is a descriptive cross-sectional study conducted on three of public civilian hospital in Sana'a city, Yemen. A structured Arabic questionnaire was implemented using face-to-face interviews. Statistical analysis will be performed using the SPSS software.

Results: The sample size was eighty-seven 87 participants, among the participants type 1 diabetes mellitus was present in 20 (23%) of participants, while type 2 diabetes mellitus present in 67(77%) of them. Manifestations of skin infection was present as follow fungal infections in 43 (49.4%), bacterial infections in 32(36.8%) and viral infections in 31(35.6%). In non-infectious manifestations dry skin was the commonest detected in 50(57.5%) of patients followed by pruritus 36(41.4 %), acrochordons 26(29.9%), acanthosis nigricans 19(21.8%), Vitiligo 16(18.4%), Necrobiosis lipoidica 13(14%) and Bullosis Diabetico-rum 3(3.5%).

Conclusion: Patients with diabetes mellitus either type 1 diabetes mellitus or type 2 diabetes mellitus may be had one or more skin manifestation, which more common in type 2 diabetes mellitus.

Keywords: Diabetes mellitus, Skin manifestation, Prevalence, dermatology, Yemen

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IMPACT OF FAMILY ILLNESS ON PSYCHOLOGICAL STATUS AND ACADEMIC PERFORMANCE AMONG MEDICAL STUDENTS, 21UMAS, SANA'A CITY

Background: Medical students are exposed to significant stressors due to the demanding nature of their academic and clinical training, leading to high levels of burnout, anxiety, and depression. The stress can be compounded by personal challenges such as family illness.

The Aim of the Study: The study aimed to assess the impact of family illness on the psychological health and academic performance of medical students.

Subjects and methods: Cross-sectional study was conducted from November 2023 to April 2024 at the Faculty of Medicine, 21 September University, a regular random sample has been used, A total of 374 students were surveyed. Data collected through socio-demographic characteristic, Family Illness-Related Questions, PSS for measuring stress levels, GHQ-12 for assessing psychological health, Brief COPE for evaluating coping strategies, Academic performance was self-reported via Grade point average. which is developed by the researchers. Validity and pilot study were examined. Data were analyzed using descriptive and inferential statistics, with significance set at $p < 0.05$. Ethical standards were strictly adhered to, with informed consent obtained from all participants.

Results: Among the 374 students, 87% reported experiencing a family member's illness, significantly impacting their lives. PSS score was 38.74, indicating high stress levels, particularly among female students (mean score 39.29) and those caring for ill parents (mean score 40.02). GHQ-12 results indicated moderate psychological distress, with higher scores among female students and those with severely ill family members. Higher stress levels were correlated with lower academic performance, with students scoring above 40 on the PSS experiencing a 20% decline in Grade point average. Effective coping strategies, such as seeking social support, were associated with lower stress and better academic outcomes. Students in Problem-Based Learning environments reported lower stress and higher academic performance compared to those in traditional Lecture-Based Learning environments. The severity and duration of the family member's illness also significantly influenced stress levels and academic performance.

Conclusion and recommendation: Family illness negatively impacts medical students' psychological well-being and academic performance. Support systems, mental health services, flexible learning options, and active learning approaches like PBL are critical to mitigate stress and enhance outcomes.

Keywords: Medical Students, Psychological Well-being, Academic Performance.

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Risk Factors of Cerebral Palsy in Children Under Five Years in Sana'a, Yemen

Background: Cerebral palsy (CP) is the most common cause of childhood onset, lifelong physical disability, manifesting due to non-progressive damage to the developing fetal or neonatal brain. The associated risk factors can rise in prenatal, perinatal, or postnatal periods. The aim of this study was to identify the risk factors for CP in Yemen.

Methods: By mean of case-control study, the study sample compromised children with CP (0-5 years) and controls without CP (matching cases in age and gender). CP risk factors and some descriptive data were determined through face- to- face parents' interviews using a structured questionnaire.

Results: Total of 91 children with CP were compared with 182 controls, males were the majority of the sample in the two groups (60.4%, 59.3% respectively), females (39.6%, 40.7% respectively), mean age (3 ± 1.5 years, 2.8 ± 1.5 years respectively). The results showed a number of factors- predominantly perinatal and postnatal- which were significantly associated with CP, including presence of green amniotic fluid, umbilical cord entanglement, obstructed labor, cyanosis, low birth weight, weak or no suckling capacity, trouble breathing after delivery, fever after delivery, seizures, heart disease, jaundice and/or infantile fever; all of which the Chi-square test results showed that the difference was statistically significant (P value < 0.05).

Conclusion: A combination of factors related to the mothers' health, delivery and neonatal periods were risk factors for CP, many of which are preventable. Improved pregnancy, maternity and neonatal care along with strict protocols for early diagnosis and timely effective intervention is essential.

Keywords: Cerebral palsy, Risk factor, LBW, Maternal health, Preterm labor, Obstructed labor.

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Prevalence Rate of Limb Amputations among Patients who were Received at 48 Medical Model Compound in Sana'a City during 2020-2023, Yemen

Background: During the past decades, the prevalence of limb amputation has increased significantly. It may be considered a health problem mainly as a result of a continuous rise in its indications and leading causes. According to many statistics, many people globally suffer from limb amputation, especially caused by wars and other traumas each year. In Yemen, limb amputations have become a serious health problem with an increasing number of new cases, especially in the last 10 years. In this study which aims to help in identifying more details to gain a better understanding of this major health problem. This study aims to evaluate the prevalence rate of limb amputation among patients who were received at 48 Medical Model Compound in Sana'a city during 2020-2023, Yemen.

Methodology: A hospital-based retrospective cross-sectional study was conducted at 48 Medical Model Compound in Sana'a city, Yemen, in the period from September 2023 to March 2024. The study population included all patients who had undergone amputation for one or more limbs and were admitted to the orthopedic ward at the compound. The sample was taken from all populations who were admitted to the orthopedic ward compound in the determined period above by using a questionnaire written in English language, the data was collected from records by researchers and carefully scrutinized for accuracy. Analysis of the data was done by, using the Statistical Package for Social Science (SPSS).

Results: During the study the total number of patients was 220. Most of limb amputations were in 2020($n=98$). Regarding the age of patients, more than half were in the age group 15 to 25 years(60.5%) which consider the largest group, followed by those who were in the age group 26 to 40 years(26.4%) than the age of 41 to 60 years (6.7%)and the age of above 60 years (6.4%)representing the smaller percentage of the total sample, mostly study samples were (97.3%) males Most were working as soldiers (93.2%). About amputation, both right and left side limbs amputation had an equal percentage (46.5%) for both, with lower limb amputation accounting to (72.3%), and below-knee amputations representing the highest percentage (45%). Trauma, whatever the type of trauma has the highest percentage (85.4%). followed by chronic peripheral vascular disease (7.27%), infection (6.81%) and lastly malignancy (0.45%). Most patients used crutches as an assistive tools post-amputation (62.3%). (99.5%) were discharge from orthopedic ward after amputation without complication and only (0.5%) were dead. Indication of amputation has a significant relation with the age of patients, gender and occupation ($p < 0.05$).

Conclusion: The Prevalence of limb amputation was higher in 2020 and had declined in each year mostly because of the decrease combat operations in the country. Trauma predominantly represented the most common cause of limb amputation, mostly war trauma. The results highlight the need to focus on patient transfer methods and the upgrade local hospitals to prevent amputation when possible.

Keywords: Limb amputations, Indication of amputation, Level of amputation, Yeme

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Relationship Between Exclusive Breast-feeding During First 6 Months and Risk of Developing Atopic Dermatitis in Public Hospitals in Sana'a City, Yemen

Background: Atopic dermatitis (AD) is one of the most common burdensome and chronic inflammatory skin diseases of childhood with a prevalence rate of up to 20% among children worldwide. Atopic dermatitis affected on the quality of life of children and parents and provided additional economic costs to families. Breastfeeding and infant feeding practices can play a role in the development of AD.

Objective: This study aimed to investigate the relationship between exclusive breastfeeding during the first six months and the risk of developing AD in children in Public Hospitals in Sana'a City, Yemen.

Methods: This cross-sectional study was carried out on children below 12-years old between November 2023 to March 2024. A structured questionnaire completed by mothers was used to collect information on socio-demographic and birth data, family history of atopy, feeding pattern during the first six months of life. Data obtained were analyzed using Statistical Package for the Social Sciences Software version 27. Test considered to be significant P value < 0.05 .

Results: The risk of AD was more than two third in children who had partial (non exclusively) breast-feeding in the first six months of life estimated by 72.4%. 57.9 % of patient have smoking in their household while 52.6% have positive family history and 75.0 % of patient who have positive family history are partial (non exclusively) breast-feeding in the first six months of life. According to type of feeding during first 6 months, there is a statistically significant association between introduced of infant formulas and other complementary feeding before the age of 6 months and Atopic Dermatitis ($P < 0.001$). The association to other atopic diseases has significant association with type of feeding during first 6 months ($P = 0.004$), while type of atopic dermatitis and age of the first presentation have no significant association with type of feeding during first 6 months ($P = 0.185$) ($P = 0.28$) respectively.

Conclusion: Exclusive breastfeeding during first 6 months with delayed introduced of infant formulas and other complementary feeding before the age of 6 months reduces the risk of AD among children, while smoking in household may has risk in developing of AD. Practice of EBF are equal in high educated mothers and low educated mothers.

Keywords: Exclusive breastfeeding; Atopic Dermatitis; smoking in household; Sana'a, Yemen.

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Prevalence and Impact of Diphtheria among Children in Al-Sab'een Hospital, Sana'a City, Yemen During 9/2022 – 12/2023

Background: Diphtheria is a health concern in Yemen, especially among children. This study aims to investigate the prevalence of the diphtheria study and associated outcomes among children admitted to Al-Sabaeen Hospital, Sana'a.

Methodology: A retrospective study will review the medical records of children admitted to the Al-Sab'een Hospital during the study period. The criteria will depend on a specific age group and confirmed diagnosis. Exclusion criteria will be applied to ensure the collection of relevant data. Data confidentiality and anonymity of patients will be maintained to protect their privacy. The sample size will be calculated based on the study period chosen.

Results: The backward study included 119 Yemeni children with diphtheria who were admitted to Al-Sabaeen Hospital. Most patients (53.8%) were under the age of six, the majority were males (57.9%, 69) compared to females (42.02%, 50%), and the vaccination rate was low (40.5% full or booster vaccination). Fever (79.0%), sore throat (67.2%), and pseudo membrane (52.9%) were the most common symptoms, while cardiac complications (33.6%) were the most frequent. The study did not show a significant statistical relationship between Age, gender, or family history and score ($P > 0.05$). However, an important statistical correlation existed between vaccination status and outcome ($P < 0.05$). The mortality rate was 30.25%, and 13.45% of cases whose results were not recorded or known.

Conclusion: We observed that vaccination was associated with good outcomes and a lower mortality rate. This underscores the urgent need for diphtheria vaccination programs for children in Yemen to reduce the burden.

Keywords: Diphtheria, children, vaccination status, mortality rate, Yemen, Al-Sabaeen Hospital.

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Prevalence of Low Back Pain and Its Associated Risk Factors among Neurosurgeons and Residents Neurosurgeons in Sana'a City., Yemen

Background: Low back pain (LBP) is a prevalent issue among neurosurgeons and resident neurosurgeons. It is considered one of the most common work-related health problems in this profession. This study was conducted in order to gain a better understanding of this issue, and to determine its prevalence and its associated risk factors among neurosurgeons and resident neurosurgeons in Sana'a city.

Methods: A cross-sectional study among neurosurgeons and resident neurosurgeons in Sana'a; their names and workplaces were obtained from the Yemeni Medical Council and from the Yemeni Neurosurgical Society. Then we went to meet them at their place of work either in private or public hospitals or in their private clinics. A self-administered questionnaire was utilized that consisted of 30 items divided into three parts including demographic data, individual and occupational characteristics, and prevalence data with pain characteristics.

Results: The study included a total of 114 participants, with 106 (93%) being male and 8 (7%) being female. The prevalence of LBP among respondents was found to be 81.6%. Several individual and occupational characteristics were associated with the prevalence of LBP with a statistically significant value ($P < 0.05$), such as body mass index ($p = 0.0105$), daily standing hours ($p = 0.0367$), weekly number of performed operations ($p = 0.01$), and daily sitting hours at work ($p = 0.0079$). Others might be associated but with no statistically significant value ($P < 0.05$), such as age, gender, years of practice, stress, smoking, daily sleep hours, and job satisfaction. The most commonly reported options for relieving the pain among affected neurosurgeons were medication and rest.

Conclusion: A high prevalence of LBP was observed among neurosurgeons and resident neurosurgeons. Several identified risk factors highlight the need for their avoidance and primary prevention strategies should be considered to minimize the occurrence of LBP in this population.

Keywords: Low Back Pain, Neurosurgeons, Sana'a City., Yemen

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Prevalence of Hand Dermatitis (eczema) among Laboratory's Staff in Althawrah, Algomhori and Alsabeen Hospitals

Background: Hand Dermatitis (hand eczema) is common and widespread chronic inflammatory skin condition, It is a frequently encountered problem, affecting individuals of various occupations, variety of factors may take part in the causation of this condition including endogenous and external/environmental factors acting either singly or in combination. It is more common in health care workers, chefs, and hair dressers whose occupations involve heavy wet work therefore aim our study is to determine the prevalence of hand dermatitis (eczema) among Laboratory's Staff. “

The Aim of the Study: The aim of this study is to identify the prevalence of hand dermatitis among laboratory Staff in the specified study area.

Subjects and methods: A cross sectional descriptive study was conducted in Althawrah, Algomhori Alsabeen hospitals in Sana'a, from February 14 to February 29 2024. The study population consisted of all Laboratory's Staff in these three hospitals, with a convenient sample of a total of 110 respondents. The study tool was collected by self-administered questionnaire which was prepared in Arabic Language. Data coded and analyzed using (SPSS) version 24. Then summarized and presented as tables and figures.

Results: Out of 110 participants, 27.3% were found to have hand dermatitis. Females accounted for 74.5% of affected Staff, with a median age of 26 years. Allergy in sites other than hands was reported by 39 participants, predominantly allergic rhinosinusitis and allergic conjunctivitis. Smoking and dust were the most common allergens reported. Family history of allergy was reported by 53.6% of participants, with rhinosinusitis being the most frequent. Eczema symptoms included itching, redness, and scaling. The condition worsened during winter for 37.7% of patients. Handwashing frequency was higher among eczema patients, while glove usage duration was associated with increased risk. Skin softener use showed mixed results, with higher prevalence of eczema at extreme usage frequencies .

Conclusion and recommendation: High hand dermatitis prevalence among lab Staff in Sana'a, Yemen, especially in females. Allergy in non-hand sites is common. Winter worsens condition. Increased risk linked to handwashing frequency, prolonged glove use. Interventions for lab Staff: hand hygiene training, suitable hand care products, minimize glove-related irritation. Identify allergens, self-assessment, early treatment.

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Prevalence of Risk Factors Associated with Neonatal Jaundice Among Newborns in Nursery Department of AL-Sabeen Hospital, Sana'a City, Yemen, 2023

Background : Neonatal jaundice is one of the most common medical disorder in neonates being aware of the predisposing factors of neonatal jaundice can be efficient in restricting of the Neonatal jaundice and the initial problem. For this reason, this study aimed to evaluate the proportion of neonatal jaundice and its associated factors among newborns.

Aim of the study: is to assess prevalence and risk factors associated with neonatal jaundice

Subjects and methods: A hospital based, retrospective cross-sectional study was conducted to determine the prevalence and risk factors associated with neonatal jaundice in nursery department in AL-Sabeen Maternity and Childhood Hospital, Sana'a City, Yemen. All variables in this study were analysed using SPSS software.

Results: In this study, about 750 neonates were examined. Our findings revealed that age , type of birth ,maternal anemia The blood type of the mother admission to NICO, ,sepsis ,Asphyxia, residence ,low platlet, pallor,poor feeding. were the significant factors associated with neonatal jaundice ($P < 0.05$). while sex, weight ,type of feeding, diabetic mother, showed negative association ($P > 0.05$)

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Assessment of Thyroid Nodules among Radiation-Exposed and Non-Exposed Healthcare-workers in Sana'a City: A Cross-Sectional Study in a Mild Iodine-Deficient Area

Introduction: Ionizing radiation, such as X-rays, C-arms, and CT scans, is widely employed in medical facilities worldwide. However, its deleterious effects on living tissues can negatively affect DNA molecules, leading to mutations and tumor genesis. The thyroid gland, due to its significant oxidative activity and its crucial role in iodine absorption, is one of the most radiation-sensitive organs. When iodine interacts with radiation, it can generate radioactive compounds that are absorbed by the thyroid, potentially causing damage.

Methods: This analytical, descriptive cross-sectional study included a sample of 280 medical staff occasionally exposed and non-exposed to radiation in eight major health facilities in Sana'a city. Data were collected through face-to-face interviews using a structured questionnaire. Thyroid ultrasounds were performed by radiologists for every sample to detect thyroid nodules, and fine-needle aspiration cytology (FNAC) was conducted for suspected nodules, followed by thyroidectomy. The collected data were analyzed using the statistical software SPSS version 27.

Results: The study revealed that 33.57% of healthcare workers had thyroid nodules. Notably, radiation-exposed workers showed a significantly higher prevalence of thyroid nodules at 39.60%, compared to 17.94% in non-exposed workers ($p = 0.002$). Among specific groups, radiology workers had the highest prevalence at 45.63%, followed by orthopedic workers (32.08%), urology workers (37.50%), and cardio catheter workers (31.82%). Interestingly the medical workers had (17.94%) [$P=0.0038$]. The thyroid nodules were largely asymptomatic, with a significant percentage of individuals unaware of their condition. Despite this, regular thyroid ultrasound screenings, the main diagnostic method for identifying thyroid nodules, were not routinely performed among medical staff. Only 5% of participants underwent annual TSH, T3, and T4 testing, highlighting a significant gap in early detection practices ($p < 0.05$). Additional factors influencing the prevalence of thyroid nodules included smoking and family history. Smokers had a significantly higher prevalence of thyroid nodules at 25.64% compared to 18.70% in non-smokers ($p = 0.001$). Moreover, 43.14% of individuals with thyroid nodules had a family history of thyroid disorders. Regarding protective measures, the use of lead aprons and thyroid shields was associated with lower prevalence rates of thyroid nodules at 35% ($p = 0.005$) and 10% ($p = 0.026$), respectively. Adjusting the C-arm position also significantly reduced the prevalence to 25% ($p = 0.022$). However, the use of TLD monitors and maintaining a safe distance of 3 meters did not show significant associations with reduced prevalence. Fine-needle aspiration cytology (FNAC) was recommended for 12 individuals with thyroid nodules, but only 5 proceeded with the procedure, while the rest refused. Among those who underwent FNAC, 4 cases indicated suspicion of papillary carcinoma, leading to thyroidectomy in these individuals. These findings underscore the necessity for effective radiation protection measures and increased awareness of thyroid health among healthcare workers exposed to radiation.

Conclusions: The study reveals a high prevalence of thyroid nodules among healthcare workers exposed to radiation, emphasizing the need for regular thyroid health monitoring. Despite many nodules being asymptomatic, routine ultrasound screenings are infrequent. Effective protective measures like lead aprons, thyroid shields, and proper C-arm positioning significantly reduce nodule prevalence. Additionally, smoking and family history are notable risk factors. The findings call for increased awareness and proactive health monitoring to mitigate radiation exposure risks and improve thyroid health among medical staff.

Keywords: Radiation exposure, shots frequency, Equipment type, thyroid nodules prevalence, association analysis.

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Prevalence of Hypertension Among Doctors in Al-gumhori hospital Sana'a city- Yemen 2023

Background: Hypertension accounts for approximately 50% of coronary heart disease and 67% of the burden of cerebrovascular disease worldwide. It is a public health challenge, affecting nearly a billion people, accounting for about half of deaths related to stroke and heart disease.

Objective: The current study aimed to evaluate the prevalence of hypertension among doctors at Al-gumhori Hospital in Sana'a city - Yemen.

Methods: A cross-sectional descriptive observational study was conducted on (110) doctors of both sexes and their average age was (35.25 ± 7.596) in the period from (December 2023- June 2024), and data related to demographic variables and daily lifestyle were collected through a structured questionnaire that was prepared in advance. It was tested, and other information (body mass index - blood pressure measurement) was taken by conducting a clinical examination, and the data was collected and analyzed using (SPSS.V25) program and tested using Chi-square to verify the extent of relationships between variables within the study at the level of significance ($P = 0.005$).

Results: The results showed that the prevalence of hypertension ($\geq 140/90$) among doctors at the Al-gumhori Hospital in Sana'a was 16 (14.5%), and their average age was (35.81 ± 10.691). There was a statistically significant relationship ($P < 0.05$) between BMI and hypertension with oscillation ratio ($OR = 3.087$, 95% CI: 1.041-9.154). There was a statistically significant relationship ($P < 0.05$) between years of work (≥ 5 years) and hypertension with Odds Ratio ($OR = 5.14$, 95% CI: 1.374-19.227). There was a statistically significant relationship ($P < 0.05$) between diabetes and hypertension with the Odds Ratio ($OR = 5.667$, 95% CI: 1.667-19.257). There was a statistically significant relationship ($P < 0.05$) between smoking and hypertension with a Odds Ratio ($OR = 3.363$, 95% CI: 1.135-9.964).

Conclusion: The prevalence of hypertension among doctors Al-Gumhori Hospital in Sana'a was high, and there was a correlation between high body mass index and infection with the disease. The researchers recommend conducting more studies on the research topic and on larger samples to verify the actual extent of the spread of the disease among medical communities.

Keywords: prevalence of blood pressure. Causes of hypertension; Factors affecting hypertension

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prevalence of depression and anxiety disorders in diabetic patients with insulin therapy

Introduction : Anxiety disorders are psychological conditions characterized by constant anxiety and fear, with physical symptoms such as tachycardia and fibrillation. Depression is a mood disorder that causes a constant feeling of sadness and loss of interest, affecting people of all ages and backgrounds. Globally, about 4% of the world's population suffers from anxiety disorders and 3.8% from depression. In Yemen, a study indicates that trauma-induced disorders are the most prevalent at 45%, followed by depression at 27% and anxiety at 25%. Globally, diabetics suffer from high rates of anxiety and depression, with studies indicating that about 20-40% of them suffer from anxiety disorder, and 12-18% suffer from depression. These mental disorders further complicate the management of diabetes and negatively affect the quality of life.

Objectives of the study : The study aims to determine the prevalence of anxiety and depressive disorders among patients with type I and II diabetes using insulin, understand the factors that contribute to the increase of these mental disorders in patients, and provide recommendations to improve psychological and physical care for diabetics. Study

Methodology : This cross-sectional meta-study was conducted on patients with type I and II diabetes who use insulin over a period of time starting from January 1 to June 30, 2024. Criteria for the inclusion and exclusion of cases have been defined to ensure the accuracy of the results. The data were collected using questionnaires and interviews with patients, and the statistics program Epi-info.7.3 as well as statistical analysis methods were used to examine the relationship between the study variables.

Results of the study : The study showed that the average age of diabetics using insulin is 44.4 years, with the largest percentage concentrated in the age group over 60 years (27.2%). The percentage of males reached 60%, the majority of whom are married (71%). The level of education of 36% of patients was only elementary, while 31% were illiterate. Functionally, 71% of patients were unemployed. In terms of negative habits, 68% of patients were non-smokers, 15% were current smokers, and 64% chewed khat. In terms of social support, 33% of patients received very little social support. In terms of mental disorders, the prevalence of depression among patients was 24%, while anxiety was very high at 75%. Only 11% of patients were using anti-anxiety or antidepressant medications. The most common symptom of anxiety was fear of the worst (32%), while loss of interest in sex (39%) was one of the most prevalent symptoms of depression. The study did not show a significant impact of demographic characteristics on anxiety and depression levels.

Conclusion and recommendations : The study showed that diabetics using insulin suffer from high rates of mental disorders, where the rate of depression was significantly prevalent and the percentage of anxiety is very high. This reflects the impact of diabetes on patients' mental health, especially with the limited use of anti-anxiety and antidepressant psychotherapies. Demographic characteristics such as age, gender, education, and marital status have not shown a significant impact on anxiety and depression levels, suggesting that other psychosocial factors may play a larger role in determining levels of these disorders. The study recommends providing psychological support to diabetics as part of comprehensive health care, training health care providers to recognize symptoms of anxiety and depression in diabetics, and promoting research in the field of diabetes mental health to develop better treatment strategies.

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Prevalence of Mood Enhancing Substances Usage Among High School Students in Sana'a City

Background: This study investigates the prevalence and associated factors of mood-enhancing substance use among high school students in Sana'a City, Yemen. Given the high rates of substance use among adolescents globally, understanding local trends and determinants is crucial for effective intervention.

Methods: A cross-sectional survey was conducted among male high school students in Sana'a City. The sample consisted of 513 students, with a median age of 17 years. Data on substance use, demographic characteristics, and potential influencing factors were collected through structured questionnaires. Statistical analyses, including chi-square tests, were used to determine associations between variables and substance use.

Results: The study revealed a high prevalence of mood-enhancing substance use, with 81% of students reporting usage. Qat emerged as the most commonly used substance (78.4%), followed by smoking (34%). Significant factors associated with substance use included religious commitment ($p < 0.001$), thoughts sharing frequency ($p = 0.018$), and family problems ($p = 0.012$). Students with weak or intermediate religious commitment and those who never shared their thoughts were more likely to use substances. Family issues also significantly increased the likelihood of substance use. Major motivations for substance intake included the pursuit of happiness (32%), experimentation (28%), and peer influence (12%). Repeated use was primarily driven by the desire to feel happy (35%) and to forget problems (22%). Unknown substances use was significantly associated with several factors

Conclusion: The findings indicate the high prevalence of mood-enhancing substance use among high school students in Sana'a City, with significant associations with religious commitment, communication patterns, and family dynamics. The study highlights the need for more investigation to address the "unknown substances" and for targeted interventions addressing these factors to curb substance use among adolescents.

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Prevalence of Diabetes Mellitus and its Associated Factors Among Chronic Kidney Disease Patients Under Hemodialysis in Sana'a City, Yemen

Background: Chronic kidney disease is a progressive loss in renal function that is more accepted as global public health importance and its magnitude is overgrowing in the least developed countries like Yemen. No data was found in Yemen on the magnitude of chronic kidney disease among diabetic disease patients.

Methods: Hospital-based cross-sectional study was conducted among 415 at Public Referral Hospital from March to May 2024 in Adult (≥ 10 years) and follow-up patients who volunteered to give informed written consent were included in the study. Systematic random sampling was used. Data were collected by interviews using structured and pre-tested questionnaires. Descriptive statistics of the continuous and categorical variables were done. The bi-variable and multivariable logistic regression was done to show the net effect of explanatory variables on chronic renal disease.

Results: A total of 415 study participants were involved in the final analysis. The Prevalence (diabetic among CKD was 26.0%) of CKD among diabetic patients was 26.0%. The mean age of the subjects was 43.40 ± 14.87 SD and 31.1% were older than 50. Regarding gender, 54.2% were males.

A significant association was found with age >50 years [AOR 3.64 (95% CI 1.42-9.29); $p=0.007$], Widowed patients [AOR 5.26 (95% CI 1.2-5.1); $p=0.021$], family monthly income range 50000-70000 YR [AOR 2.93 (95% CI 1.41-6.09); $p=0.004$], two years diagnosed with chronic kidney disease [AOR 3.45 (95% CI 1.97-6.04); $p<0.001$], hypertensive patients [AOR 1.80 (95% CI 1.12-2.91); $p=0.016$], Retinopathy [AOR 11.31 (95% CI 6.44-19.85); $p<0.001$], used Metformin drug [AOR 23.07 (95% CI 2.75-193.61); $p=0.004$], family history as first and second degrees [AOR 3.84 (95% CI 1.88-7.83); $p<0.001$] and [AOR 0.16 (95% CI 0.07-0.41); $p<0.001$], respectively, irregular follow up for DM [AOR 6.85 (95% CI 1.33-14.20); $p<0.001$], aware of that DM is a risk factor for renal problems [AOR 0.37 (95% CI 0.17-0.82); $p=0.014$].

Conclusion: The magnitude of diabetic patients follow up among chronic kidney disease was 26.0%. Estimated GFR should be determined for diabetic patients at regular intervals of time for earlier diagnosis of chronic kidney disease.

Keywords: Diabetes mellitus, chronic kidney disease, Prevalence, Risk factors, Yemen

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Evaluation of Health-Providers Knowledge about Diagnosis and Management of Gestational Diabetes in Sana'a, Yemen. 2023-2024

Background: Gestational diabetes mellitus (GDM) traditionally refers to abnormal glucose tolerance with onset or first recognition during pregnancy. GDM has long been associated with obstetric and neonatal complications primarily relating to higher infant birth weight and is increasingly recognized as a risk factor for future maternal and offspring cardiometabolic disease. It is therefore very important to evaluate the medical staff about GDM diagnosis and treatment

The aim of the study : Evaluation of Health-Providers Knowledge about Diagnosis and Management of Gestational Diabetes in Sana'a, Yemen.

methods: Cross-sectional study done in Sana'a city This study was conducted in Al-Thawra Hospital Authority, Republican Hospital Authority, Kuwait University Hospital. Al-Sabeen Hospital for Maternity and Childhood, 48 Model Hospital in Sana'a city, in the academic year 2023-2024, for health care providers in Obstetrics and Gynecology department.

Results: The study was conducted on 170 healthcare providers in hospitals across Sana'a during the academic year 2023-2024. The sample included 48% doctors, 29% nurses, and 23% midwives. Key Findings:

Knowledge of GDM: Only 62% of participants were aware of gestational diabetes mellitus (GDM). Diagnosis and Treatment: 48% could diagnose GDM, and 47% were capable of treating it. Causes of Deficiencies:

1. Practical Experience: 64% had less than 5 years of experience, and only 46% of them were familiar with GDM. 11% had more than 10 years of experience, and all of them were familiar with the disease.
2. Training: 37% received specialized training, with 81% capable of diagnosing and 77% capable of treating GDM. 64% did not receive any training, and only 30% of them could diagnose and treat the disease.
3. Resources: Only 22% had access to adequate training resources, and 50% of them regularly followed scientific updates on GDM.

Conclusion: Based on our study findings, we recommend prioritizing the following:

1. Intensifying scientific courses, seminars, and continuous health education programs tailored to increase healthcare workers' knowledge about gestational diabetes mellitus (GDM).
2. Establishing a standardized and accessible database to serve as a reliable reference for receiving and updating information on GDM management and guidelines.

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Association Between Complicated Pertussis Cases and Vaccination Status in Children Below the Age of Five in Al Sabeen Hospital in Sana'a City 2022-2023

Background: Pertussis, widely recognized as whooping cough, persists as a serious illness with high morbidity and mortality. It continues to affect all ages particularly vulnerable children under the age of five and is associated with various complications which lead to hospital admission.

Objective: This study aims to determine the relationship between vaccination status of the children and development of complications among pertussis cases.

Methods: A descriptive analytical study used available and complete data from hospital files of the department that was conducted on (272) pertussis cases of children below 5 years who are admitted to the Pediatric department of public hospitals specifically Al-Sabeen Hospital in Sana'a city, Yemen. over a period of one year from May, 2022 to May 2023. Data was gathered through printed questioners and inserted manually by 13 researchers. It was analyzed by Excel Microsoft and SPSS version 22.

Results: The study included 272 child diagnosed with pertussis who were admitted to Al-Sabeen hospital. The majority of cases were males (59%), and (57%) of them were under six months of age. Most cases (95%) presented with a paroxysmal cough, and (79%) had a low-grade fever. Notably, 56% of cases were unvaccinated. The duration of symptoms was less than two weeks in (81%) of cases. Complications included pneumonia in 42% of cases. Treatment mainly consisted with intravenous fluids (90%), azithromycin (74%), ampicillin (65%) and others. The study found no significant difference in pertussis cases clinical presentation between different regions.

Conclusions: We concluded that pertussis complications such as pneumonia were significantly more prevalent in unvaccinated children. Additionally, that vaccinated cases were particularly low, with only 34.3% of rural and 28% of urban cases being vaccinated.

Recommendation :

- We recommend the medical team at Hospitals register all the patient data including complete medical history, examine the patient perform the necessary investigation completely, and add them to the patient's file because some files data were missing.
- We recommend the researches to conduct further studies on vaccine effectiveness
- We recommend ministry of health and population to increase public awareness about vaccination importance.

Keywords: pertussis, vaccination, whooping cough, complications, unvaccinated, paroxysmal cough.

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Human Rabies Status in Yemen During 2019 - 2022

Introduction: Rabies is a common serious zoonotic viral infectious disease. The number of people at risk of Rabies are more than 3 billion in over 150 countries and territories. It causes about 50000-60000 human deaths annually worldwide. The majority of the deaths where in Asia and Africa. Yemen is a country in which canine rabies is endemic. Annually up to 14,000 people are exposed to animal bites in Yemen. Mortality cases were between 17 to 69 per year as recorded.

Objectives: Estimate the number of human rabies cases, socio-demographic characteristics of individuals affected, case fatality rate in Yemen during the period from 2019 to 2022.

Methodology: A retrospective registry-based cross-sectional descriptive study conducted in Yemen during the period from 2019 to 2022

Results: The results show that there were an estimated 61294 and 174 cases and mortality respectively. The number of males is about two times and more the number of females with 43619(71.16%) and 17675 (28.83%) respectively. In the age group [More than 5 years], the number of cases was the highest; 54415 (88.77%) cases, followed by the age group [Less than years]; 6879(11.22%) cases

Conclusion: Rabies is endemic in Yemen and remain a significant public health hazard with a very high annual rabies cases and mortality. Male children above 5 years were most often involved and victims in attacks by rabies positive animals

Recommendations

1. We encourage other scholars to do further research about rabies since the studies about it in our country are very few.
2. Asking the Yemeni Ministry of Health and Population to provide the anti-serum HRIG instead of ERIG and vaccines in adequate amounts, with continuous supply.
3. Supporting the NRCP to write reports in certain circumstances, such as political conflict and wars to avoid missing reports.
4. Write other cases. variables such as case occupation, site of bite, and level of education in the reports on NRCP. And reduce the number of stray dogs in Yemen

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Causes of Retinal Vein Occlusion in Patients with Medical Evaluation in Cardiovascular Clinic

Background: Retinal vein occlusion (RVO), is a sight-threatening condition that most commonly affects middle-aged to older people . While its exact cause is unclear, studies show that hypertension and related retinal changes, such as arteriovenous nicking are most significant risk factors. Other important factors include a history of heart attack, stroke ,and high levels of cholesterol and creatinine.

The aim of the study: This study aimed to examine the causes related to retinal vein occlusion in patients attending the cardiovascular clinic.

Methodology: Retrospective study was conducted at OP cardiovascular clinic in Sana'a city -Yemen. Structured questionnaire was implemented and filled out from the patient files of the Cardiovascular Clinic. The questionnaire also included sociodemographic data and the collected data was entered and analyzed using the statistical program (SPSS).

Result: The study revealed that hypertension is the most significant risk factor for retinal vein occlusion (RVO), followed by a history of heart attack, stroke, elevated levels of total cholesterol, and creatinine. The structured questionnaire and data analysis showed that the majority of respondents having high levels of ALT (88.2%), AST (94.1%), GGT (97.1%), and bilirubin, indicating a significant association with RVO. Additionally, 91.2% of respondents had elevated platelet (PLT) levels, 73.5% had elevated HbA1c levels indicating diabetes, and 55.9% had elevated LDL levels indicating hyperlipidemia.

A substantial number of respondents had abnormal echocardiography results, highlighting the cardiovascular link to RVO.

Conclusion: The findings confirm that hypertension is the predominant risk factor for RVO among patients attending the cardiovascular clinic in Sana'a city, Yemen. Diabetes (73.5%) and hyperlipidemia (55.9%) were also significant risk factors associated with RVO.

The study underscores the importance of managing cardiovascular risk factors to prevent the onset of RVO, It is recommended that regular screening and management of hypertension, diabetes, hyperlipidemia, and related cardiovascular conditions be emphasized to reduce the incidence of RVO, Further research is needed to explore other potential risk factors and mechanisms underlying RVO development.

Keywords: Retinal vein occlusion (RVO), Cardiovascular Clinic, Sana'a, Yemen

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Knowledge, Attitudes and Practice of Used Ocular Steroid Drugs among Patients Suffering from Eye Redness in AL-Thawra, AL-Gomhory, and AL-Maghrbi Hospital's, Sana'a City, Yemen

Background: Steroids refer to a man-made version of chemicals, known as hormones, that are made naturally in the human body to reduce inflammation with several diseases and conditions and are called corticosteroids or anti-inflammatory agents.

Objective: The study was conducted to assess KAP and risk factors for using ocular steroid drugs among patients who suffer eye redness.

Methodology: A hospital-based cross-sectional descriptive study was conducted among patients who suffer from eye and use steroidal drugs, A structured questionnaire was implemented using face-to-face interviews. Data obtained were analyzed using SPSS Software. Descriptive statistics were performed to describe the socio-demographic, knowledge, attitudes, and practices variables. Data is described by frequencies; percentages means and SD. The chi-square test was used to test differences independent variables about socio-demographic characteristics. Test considered to be significant p. value < 0.05.

Results: The sample was 453 participants included the mean age was 42.32 ± 15.97 years. The male (58.9%), while female (41.1%), 60.9% of participants had negative knowledge, 50.8% had negative attitude, and 73.2% had poor practice on used ocular steroid drugs among patients suffering from eye redness. It is important to activate the role of health education to everyone who has direct contact with the patient, to minimize the use of ocular steroid drugs.

Conclusion: All the patients had a lack of knowledge, attitude, and practice toward using ocular steroid drugs among patients suffering from eye redness.

Keywords: ocular steroid drugs, Knowledge, Attitude, Practice, Yemen.

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Incidence of Migraine in Patients Admitted for Septoplasty as a Treatment for Headache in Sana'a Hospitals in 2023

Introduction: Headaches, particularly migraines, are prevalent and significantly affect daily life and quality of life. Underdiagnosis is common, especially when differentiating between primary migraines and secondary headaches like rhinogenic headaches caused by nasal septal deviation (NSD). This study aims to investigate the incidence of migraines in patients undergoing septoplasty for headache relief, focusing on the misdiagnosis of migraines as rhinogenic headaches.

Problem Statement: Despite septoplasty being a common intervention for headache relief, persistent headaches post-surgery suggest potential underdiagnosis. Distinguishing between primary migraines and secondary rhinogenic headaches is crucial for setting realistic patient expectations and improving treatment outcomes.

Methods: This analytic cross-sectional study was conducted from February to April 2023 in major government hospitals in Sana'a, Yemen. It included 203 patients (123 females, 80 males) undergoing septoplasty for headache relief. Data were collected using a bilingual questionnaire based on the International Headache Society's migraine diagnostic criteria and analyzed using SPSS.

Results: Among the 203 patients, 30.05% were diagnosed with migraines and 6.9% with probable migraines. The study found a high prevalence of migraine among females (61%) and young adults (69%). Common symptoms included nasal obstruction (67.5%) and dizziness (5.83%). Headache characteristics varied, with 38.61% experiencing daily episodes and 79% reporting throbbing pain. Precipitating factors included loud noises and bright lights (79%), and sleep irregularities (72%).

Conclusion: The study highlights a significant presence of migraines among patients presenting with NSD for septoplasty. Accurate differentiation between migraine and rhinogenic headaches is essential to avoid unnecessary surgical interventions and ensure appropriate migraine management. Comprehensive diagnostic evaluations prior to surgery can enhance patient outcomes and satisfaction.

Significance of the Study: This research emphasizes the importance of accurate diagnosis in distinguishing between migraines and secondary rhinogenic headaches. It advocates for thorough medical history-taking and adherence to migraine diagnostic criteria to prevent unnecessary surgeries and improve patient care.

Objectives:

- Find the incidence of scheduled septoplasty for patients complaining of headache due to other causes than nasal problem. (Migraine)
- Raise the awareness of the association between migraine and nasal diseases.
- Increase the awareness among care professionals of the importance of migraine criteria.

Key Contributions:

1. Clarification of Diagnostic Accuracy: Emphasizes the need for accurate differential diagnosis to prevent unnecessary surgical interventions.
2. Enhancement of Clinical Practice: Advocates for thorough medical history-taking and adherence to migraine diagnostic criteria.
3. Public Health Implications: Raises awareness about the frequent misdiagnosis of migraines as rhinogenic headaches.
4. Guidance for Future Research: Identifies gaps and suggests areas for further research on the relationship between nasal conditions and migraines.
5. Implications for Surgical Decision-Making: Provides data to inform surgical decisions regarding septoplasty.

This study underscores the critical need for accurate diagnosis and appropriate treatment of headaches to improve patient outcomes and optimize healthcare resources.

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Knowledge, Attitude and Practice Regarding Cervical Cancer among Women of Reproductive Age in Sana'a City Yemen 2023

Background: Cervical cancer is a leading cause of mortality among women worldwide, particularly in low-resource settings. Early detection through screening can significantly reduce the disease burden. However, in Yemen, data on cervical cancer awareness and prevention practices remain limited.

The Aim of the Study This study aimed to assess the knowledge, attitude, and practice (KAP) towards cervical cancer among women of reproductive age attending gynecology outpatient clinics in public hospitals in Sana'a City, Yemen.

Subjects and methods A descriptive, cross-sectional study was conducted using a structured questionnaire to evaluate socio-demographic characteristics, knowledge, attitude, and practice related to cervical cancer. The study included 250 women of reproductive age attending public hospitals in Sana'a City from December 1 to December 30, 2023.

Results: The findings revealed a positive association between knowledge and both educational level and age at marriage ($p < 0.05$). Positive attitudes were significantly related to age, educational level, and age at marriage ($p < 0.05$), except for education, which showed a negative correlation with attitude ($p > 0.05$). Despite high willingness for screening and vaccination, practices towards cervical cancer prevention remained inadequate.

Conclusion and recommendation: The study highlights a deficiency in cervical cancer knowledge and prevention practices among women, influenced by socio-demographic factors. Educational programs targeting schools, universities, and healthcare settings, along with community awareness campaigns via media and healthcare professionals, are urgently needed to promote cervical cancer prevention and screening.

Keywords: cervical cancer, screening, knowledge, attitude, practice, Yemen

Researchers

- Yussra Al-ameri
- Hanadi Al-s elwi
- Ghaith Al-rubaiee
- Ekram Al-hazmi
- Dahan Al-aqaby
- Radfan Yassin

- Mai Al-fardi
- Hashem Al-zubairi
- Moain Al-sabal
- Nagebah Sharian
- Ola Mansour Jabal
- Husam Al-sanany

Supervised by

- Dr. Muneera Shaher
- Dr. Basheer Al-Nabehi
- Dr. Muneera Al-Faiq

The Role of Ultrasonography in Detecting Urinary Tract Calculi Compared to CT scan

Introduction: This study aimed to evaluate the diagnostic accuracy of ultrasound (US) in detecting urolithiasis and identify potential predictors affecting its sensitivity. Additionally, the study explored the presence of hydronephrosis in urolithiasis patients and its associated factors. The characteristics of the stones and their correlation with US findings were also investigated.

Methods: In this cross-sectional study A total of 176 patients suspected of having urolithiasis underwent both US and CT scan examinations. Among them, 139 patients were confirmed to have urolithiasis based on CT scan results. Sociodemographic data, family history, Qat chewing habits, and clinical symptoms were recorded. The sensitivity, specificity, positive predictive value (PPV), negative predictive value (NPV), and accuracy of US in detecting urolithiasis were calculated. Chi-square and Mann-Whitney tests were used to assess the association between US findings and categorical or continuous variables, respectively. The presence and predictors of hydronephrosis were also analyzed.

Results: The majority of the confirmed urolithiasis patients were males (70%) in the age group of 31-45 years. Flank pain was the most common symptom, followed by dysuria and hematuria. Hydronephrosis was observed in 76.2% of patients. Multiple stones and unilateral stones were predominant in hydronephrosis cases. the sensitivity and specificity of US are 75% and 72.5% respectively with an accuracy of 74.6%. Stone size and location significantly influenced the sensitivity of US, with smaller stones and distal ureteral stones showing lower detection rates. The sensitivity of US was higher for kidney stones compared to ureteral stones, and it was lower for left ureteral stones compared to right ureteral stones.

Conclusion: Ultrasound has limited sensitivity and specificity in detecting urolithiasis, especially for smaller stones and those located in the distal ureter. The presence of hydronephrosis is common in urolithiasis patients, with males being more affected. Stone size and location are significant predictors of US detection rates. These findings highlight the importance of considering alternative imaging techniques and evaluating clinical factors to improve the diagnosis and management of urolithiasis.

Researchers

- Aseel Al-jadrah
- Anas Obaied
- Ali Al-sharaia
- Yousef Al-awdi
- Ali Al-theeb
- Elyas Hayash
- Aseel Toti

- Anwar Al-madagmer
- Mohammed Abdulmoghni
- Mohammed Al-humaidi
- Abdunnasser Abdullatteef
- Abdullatteef Abu- Alrijal
- Ahmed Altaweal

Supervised by

- Dr\ Muneera Shaher
- Dr\ Muneer Al-shukri

Prevalence Of Cardiogenic Shock Among Patients With Acute Myocardial Infarction Admitted To Intensive Care Unit (At Al-Thawra & Al-Gumhori Hospitals, Sana'a, Yemen) (From 1st October 2023, To 1st March 2024)

Background: Cardiogenic shock (CS), a severe condition often resulting from acute myocardial infarction (AMI), is marked by reduced cardiac output and tissue hypoperfusion, leading to high morbidity and mortality rates globally. Despite advancements, data on its prevalence and risk factors in Yemen remain scarce, highlighting the need for localized studies.

Objective: To assess the prevalence of cardiogenic shock among AMI patients admitted to intensive care units (ICUs) at Al-Thawra and Al-Gumhori hospitals in Sana'a City, Yemen. This study also aims to identify associated demographic characteristics, personal habits, acute coronary syndrome etiology, risk factors & significant past medical history, clinical features (symptoms & physical examination), vital signs, hemodynamic parameters, and diagnostic factors (laboratory investigation, electrocardiogram findings and echocardiography parameters) contributing to (CS).

Methodology: This study is hospital-based, prospective cross-sectional study enrolled 85 patients diagnosed with (AMI) (between October 1st, 2023, to March 1st, 2024). Data were collected using structured questionnaires and included demographic details, personal habits, acute coronary syndrome etiology, risk factors & significant past medical history, clinical features (symptoms & physical examination), vital signs, hemodynamic parameters, laboratory findings, electrocardiogram findings and echocardiography parameters. Statistical analyses were performed using SPSS version 27.

Results: Among 85 patients, the prevalence of cardiogenic shock was identified and analyzed against various risk factors which formed 55 (64.7%). The majority of participants were male (76.5%) and aged between 41-60 years were (65.9%). Key risk factors included advanced age, male gender, khat chewing, smoking and significant past medical history. Clinical features such as persistent hypotension and reduced left ventricular ejection fraction (LVEF) were prominent among patients with CS.

Conclusion: The study provides crucial insights into the prevalence and determinants of CS in Yemen, underscoring the significance of targeted risk assessment and early intervention strategies to reduce associated mortality rates.

Key words: Cardiogenic Shock, Acute Myocardial Infarction, Prevalence, Demographic Factors, Yemen.

Researchers

- Abdulwahab Al-Mansoob
- Abdulwahab Al-awsaji.
- Yassin Hatmee
- Mohammed M. Al-zahri
- Ahmed Haisan
- Najm Al-saidi
- Abdulwahab Moqbel
- Abdullah Al-atify
- Ali M Al-khairani

Supervised by

- Dr. Bander Al Saleh

Incidence of Migraine in Patients Admitted for Septoplasty as a Treatment for Headache in Sana'a Hospitals in 2023

Introduction: Headaches, particularly migraines, are prevalent and significantly affect daily life and quality of life. Underdiagnosis is common, especially when differentiating between primary migraines and secondary headaches like rhinogenic headaches caused by nasal septal deviation (NSD). This study aims to investigate the incidence of migraines in patients undergoing septoplasty for headache relief, focusing on the misdiagnosis of migraines as rhinogenic headaches.

Problem Statement: Despite septoplasty being a common intervention for headache relief, persistent headaches post-surgery suggest potential underdiagnosis. Distinguishing between primary migraines and secondary rhinogenic headaches is crucial for setting realistic patient expectations and improving treatment outcomes.

Methods: This analytic cross-sectional study was conducted from February to April 2023 in major government hospitals in Sana'a, Yemen. It included 203 patients (123 females, 80 males) undergoing septoplasty for headache relief. Data were collected using a bilingual questionnaire based on the International Headache Society's migraine diagnostic criteria and analyzed using SPSS.

Results: Among the 203 patients, 30.05% were diagnosed with migraines and 6.9% with probable migraines. The study found a high prevalence of migraine among females (61%) and young adults (69%). Common symptoms included nasal obstruction (67.5%) and dizziness (5.83%). Headache characteristics varied, with 38.61% experiencing daily episodes and 79% reporting throbbing pain. Precipitating factors included loud noises and bright lights (79%), and sleep irregularities (72%).

Conclusion: The study highlights a significant presence of migraines among patients presenting with NSD for septoplasty. Accurate differentiation between migraine and rhinogenic headaches is essential to avoid unnecessary surgical interventions and ensure appropriate migraine management. Comprehensive diagnostic evaluations prior to surgery can enhance patient outcomes and satisfaction.

Significance of the Study: This research emphasizes the importance of accurate diagnosis in distinguishing between migraines and secondary rhinogenic headaches. It advocates for thorough medical history-taking and adherence to migraine diagnostic criteria to prevent unnecessary surgeries and improve patient care.

Objectives:

- Find the incidence of scheduled septoplasty for patients complaining of headache due to other causes than nasal problem. (Migraine)
- Raise the awareness of the association between migraine and nasal diseases.
- Increase the awareness among care professionals of the importance of migraine criteria.

Key Contributions:

1. Clarification of Diagnostic Accuracy: Emphasizes the need for accurate differential diagnosis to prevent unnecessary surgical interventions.
2. Enhancement of Clinical Practice: Advocates for thorough medical history-taking and adherence to migraine diagnostic criteria.
3. Public Health Implications: Raises awareness about the frequent misdiagnosis of migraines as rhinogenic headaches.
4. Guidance for Future Research: Identifies gaps and suggests areas for further research on the relationship between nasal conditions and migraines.
5. Implications for Surgical Decision-Making: Provides data to inform surgical decisions regarding septoplasty.

This study underscores the critical need for accurate diagnosis and appropriate treatment of headaches to improve patient outcomes and optimize healthcare resources.

Researchers

- Ali Altairi
- Waseem Qasabah
- Ali Altais
- Fadhil Humaid
- Asmaa Sharaha
- Eman Maodah
- Munassar Alkhader
- Sahar Aldobili
- Najeesh Alnahari
- Ghadeer Hussien
- Alwan Alshmeri
- Salma Almaswari

Supervised by

- Dr. Abdulelah Thabet
- Dr. Fouad Shamsan

Knowledge, Attitude and Practice Regarding Cervical Cancer among Women of Reproductive Age in Sana'a City Yemen 2023

Background: Cervical cancer is a leading cause of mortality among women worldwide, particularly in low-resource settings. Early detection through screening can significantly reduce the disease burden. However, in Yemen, data on cervical cancer awareness and prevention practices remain limited.

The Aim of the Study This study aimed to assess the knowledge, attitude, and practice (KAP) towards cervical cancer among women of reproductive age attending gynecology outpatient clinics in public hospitals in Sana'a City, Yemen.

Subjects and methods A descriptive, cross-sectional study was conducted using a structured questionnaire to evaluate socio-demographic characteristics, knowledge, attitude, and practice related to cervical cancer. The study included 250 women of reproductive age attending public hospitals in Sana'a City from December 1 to December 30, 2023.

Results: The findings revealed a positive association between knowledge and both educational level and age at marriage ($p < 0.05$). Positive attitudes were significantly related to age, educational level, and age at marriage ($p < 0.05$), except for education, which showed a negative correlation with attitude ($p > 0.05$). Despite high willingness for screening and vaccination, practices towards cervical cancer prevention remained inadequate.

Conclusion and recommendation: The study highlights a deficiency in cervical cancer knowledge and prevention practices among women, influenced by socio-demographic factors. Educational programs targeting schools, universities, and healthcare settings, along with community awareness campaigns via media and healthcare professionals, are urgently needed to promote cervical cancer prevention and screening.

Keywords: cervical cancer, screening, knowledge, attitude, practice, Yemen

Researchers

- Yussra Al-ameri
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- Ghaith Al-rubaiee
- Ekram Al-hazmi
- Dahan Al-aqaby
- Radfan Yassin

- Mai Al-fardi
- Hashem Al-zubairi
- Moain Al-sabal
- Nagebah Sharian
- Ola Mansour Jabal
- Husam Al-sanany

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- Dr. Basheer Al-Nabeheh
- Dr. Muneera Al-Faiq

Diagnostic Accuracy of Mammography and Ultrasonography For Breast Cancer Correlated with Histopathological Result In Yemeni Women at AL-Amel Oncology Center Sana'a-Yemen 2023.

Background: Breast cancer is the most prevalent cancer globally, of all new cases. In Yemen, breast cancer represents 30.3% of cancers among women. Early diagnosis through imaging modalities like mammography and ultrasound is critical, particularly in resource-limited settings.

Aim: This study aimed to evaluate the diagnostic accuracy, sensitive and specificity of mammography and ultrasonography in detecting breast cancer, correlating imaging findings with histopathology results as the gold standard. **Methods:** A retrospective cross-sectional study in Al-Amel Oncology Center, Sana'a, Yemen, from January to December 2023. The BIRADS scoring system was employed to categorize imaging findings of MG and US, and measures such as sensitivity, specificity, accuracy, positive predictive value (PPV), and negative predictive value (NPV)

Results: Most cases were aged between 35 and 45 years, as it turns out that their marital status is married and the majority presented late, predominantly classified as BI-RADS categories 4 and 6 (93%). Mammography and ultrasonography demonstrated sensitivity and specificity of 93.7% and 57.7%, respectively, with an overall diagnostic accuracy of 87%. the Diagnostic Performance in BI-RADS 5 achieved 100% sensitivity and 94.7% PPV, NPV (5%) with significant p value 0.001 while BI-RADS 4 showed moderate sensitivity and PPV (84.6 %) indicating a high false rate and the need for biopsy, both mammography and ultrasonography were correlated with histopathology results, showing 87% agreement ($P=0.001$). However, false-positive rates (overestimation) were observed at 9.9% for ultrasonography and 7.6% for mammography, while false-negative rates (underestimation) were 2.4% for both modalities

Conclusion: Mammography and ultrasonography are reliable diagnostic tools for detecting breast cancer, especially in advanced BI-RADS categories. The combined application of both modalities improves diagnostic accuracy and demonstrates strong correlation with histopathological findings. These results highlight the importance of refining diagnostic protocols and enhancing radiologist training to optimize breast cancer detection, particularly in resource-limited settings

Key words: breast cancer, ultrasound, mammography, histopathology, image, accuracy, specificity, sensitivity, correlate, Yemen, 2023

Researchers

- Ayman Al-Aqiadhia
- Muammar Al Ghouli
- Mohammed Helal
- Safwan Hanash
- Abdu Almashriqi
- Abdullah Althmari
- Ayman AL-Wan
- Munther Kasem
- Shahd Al-seraji
- Liza Al -Borihi
- Fatima Al- Anasi
- Jalal Al shaabi

Supervised by

- Dr: Bushra AL Sharee
- Dr: Basheer AL-Nabehi

Scientific Program

1ed day

Session

1

Chairmen (Alphabetical order):

- Dr. Abdul Al Fattah Altam
- Dr. Abdulrakib Al-Mirah
- Dr. Mujahead Measar
- Dr Fares AL hajami
- Dr .Mohmed Shams Eldin .
- Dr. Muneera Shaher

N	Group	Research Title	Supervisor	Time
1	CC1	Prevalence of Low Back Pain and Its Associated Risk Factors among Neurosurgeons and Residents Neurosurgeons in Sana'a City., Yemen	Dr. Mujahead Measar Dr. Esmail Al-Hoothi Dr. Basheer Al-Nabahee	8:30-8:45
2	S1	Prevalence of Complications & Risk Factors And Causes of Delayed Diabetic Foot Management Among Patients at Al-Thaorah And Al jomhori Hospitals Sana'a, Yemen	Dr. Abdul Al-fattah Altam Dr. Muneera Shaher	8:45-9:00
3	B1	Prevalence Rate of Limb Amputations among Patients who were Received at 48 Medical Model Compound in Sana'a City during 2020-2023, Yemen	Dr. Abdulrakib Al-Mirah Dr. Muneera Shaher	9:00-9:15
4	B2	Prevalence of Vitamin D Deficiency and Associated Risk Factors among People in Sana'a, Yemen .	Dr. Abdulrakib Al-Mirah Dr. Muneera Shaher	9:15-9:30

Registration 08:30 – 08:00

Session

2

Chairmen (Alphabetical order):

- Dr. Abdulrahman Al-harazi
- Dr. Amat Alkarem Al-hori
- Dr. Moneerah Al-Faiq
- Dr. Salwa Al-Ghumairi
- Dr Eman alsharai
- Dr Aliah Shuaib
- Dr. Muneera Shaher

N	Group	Research Title	Supervisor	Time
1	G1	Indications of Cesarean Section Deliveries among Mothers in Al-Sabeen Hospital - Sana'a, 2023-2024	Dr. Salwa Al-Ghumairi Dr. Muneera Shaher	9:30-9:45
2	G2	Assessment of Nurses Knowledge about Preventive and Therapeutic Measures of Postpartum Hemorrhage in Government Hospitals, Sana'a city 2023.	Dr. Moneera Alfaiq Dr. Muneera Shaher	9:45-10:00
3	G3	Evaluation of Health-Providers Knowledge about Diagnosis and Management of Gestational Diabetes in Sana'a	Dr. Salwa Al-Ghumairi Dr. Abdulelah Thabet	10:00 - 10:15

Breakfast 15 min 10:15– 10: 30

Scientific Program

1ed day

Session

3

Chairmen (Alphabetical order):

- Dr. Hauria Alsabri
- Dr. Nabil Taresh.
- Dr. Salh Athib
- Dr. Mohammed Al-Eryani.

N	Group	Research Title	Supervisor	Time
1	O1	Causes of Retinal Vein Occlusion in Patients with Medical Evaluation in Cardiovascular Clinic	Dr. Nabil Taresh Dr. Basma Al-Refai	10:30-10:45
			Dr. Abdulelah Thabet	
2	O2	Pattern of Presentation and Outcome of Surgical Management of Glaucoma at Al -Magrebi Eyes Hospital, Sana'a City ,Yemen	Dr .Mohammed Al-hemyari	10:45-11:00
			Dr. Hauria Alsabri	
3	O3	Prevalnce Of Cataract and Associated Risk Factors among Ophthalmic Outpatients at Sana'a Hodbital	Dr. Mohammed Alharazi	11:00-11:15
			Dr. Hourie Alsabri	
4	O4	Knowledge, Attitudes and Practice of Used Ocular Steroid Drugs among Patients Suffering from Eye Redness in AL-Thawra, AL-Gomhory, and AL-Maghrbi Hospital's, Sana'a City, Yemen	Dr. Hisham Al-Akhlee	11:15-11:30
			Dr. Basheer Al-Nabehy	

Session

4

Chairmen (Alphabetical order):

- Dr. Abdulelah Thabet
- Dr. Fouad Shamsan
- Dr. Mohammed Qeran
- Dr. Salwa'a Al-Hammadi

N	Group	Research Title	Supervisor	Time
1	E1	Assessment of Anti-Streptolysin O Level in Patients with and without Rheumatic Heart Disease in Sana'a City, Yemen.	Dr. Fouad Shamsan	11:30 –11:45
			Dr. Abdulelah Thabet	
2	E2	Incidence of Migraine in Patients Admitted for Septoplasty as a Treatment for Headache in Sana'a Hospitals in 2023	Dr. Fouad Shamsan	11:45-12:00
			Dr. Abdulelah Thabet	

Scientific Program

2ed day

Session

1

Chairmen (Alphabetical order):

- Dr. Mutaia Abuarij
- Dr. Sahar Alaudi
- Dr. Ali Farhan
- Dr.Nevin Al-maysari
- Dr .Muneera Shaher
- DR. Maher AL murash

N	Group	Research Title	Supervisor	Time
1	D1	Relationship Between Exclusive Breastfeeding During First 6 Months and Risk of Developing Atopic Dermatitis in Public Hospitals in Sana'a City, Yemen	Dr. Nojood Albaadani	8:30-
			Dr. Muneera Shaher	8:45
2	D2	Prevalence, Knowledge, Attitude, Practices and Psychological Impact of Acne Vulgaris among Medical Students at University of 21 September, Sana'a- Yemen 2023.	Dr. Sahar Alaudi	8:45-
			Dr. Basheer Alnabehi	9:00
3	D3	Prevalence of Hand Dermatitis (eczema) among Laboratory's Staff in Althawrah, Algomhori and Alsabeen Hospitals.	Dr. Ali Farhan	9:00-
			Dr. Muneera Shaher	9:15
4	D4	A Study of The Prevalence of Skin Manifestation Among Diabetic Patients Attending Dermatological Outpatient Clinics of Public Hospitals, Sana'a City-Yemen-2023.	Dr. Mutaia Abuarij	9:15-
			Dr. Basheer Al-Nabehi	9:30

Session

2

Chairmen (Alphabetical order):

- Dr. Ahmed Mubarak
- Dr. AbdIrhman AL-Hadi
- Dr. Abdulkhalequ Sallam
- Dr. BasheerAL Nabehi
- Dr. Halha A. AL-Khrbish
- Dr. Nora Noraldeen

N	Group	Research Title	Supervisor	Time
1	P1	Risk Factors of Cerebral Palsy in Children Under Five Years in Sana'a, Yemen	Dr.Nora Noraldeen	9:30-
			Dr. Moamer Badi	9:45
2	P2	Complications and Outcomes of Measle in Admitted Pediatric Patients in Main Referral Hospitals, Sana'a City, Yemen ,2023	Dr. Mohamed Aqlan	9:45-
			Dr. Muneera Shaher	10:00
3	P3	Patterns and Determinants of Blood and Blood Products Transfusion in Neonates at Al Sabeen Hospital in Sana'a City, Yemen (Sep. 2022-Aug. 2023).	Dr. Nawal Moghules	10:00-
			Dr. Fadl Shujaaldeen	10:15
4	P4	Association Between Complicated Pertussis Cases and Vaccination Status in Children Below the Age of Five in Al Sabeen Hospital in Sana'a City	Dr. Reem Al-Ammari	10:15-
			Dr. Ahlam Al-Saidi	10:30

Scientific Program

2ed day

Session

3

Chairmen (Alphabetical order):

- Dr. Fadl Shujaaldeen
- Dr. Najla Al-Sonboli
- Dr. Nora Noraldein
- Dr.Abdulwahab alhifi

N	Group	Research Title	Supervisor	Time
1	P5	Hyperglycemia During Induction Phase Chemotherapy in Childhood Acute Lymphocytic Leukemia	Dr. Sarah Ismail Al-Maabri	10:30-10:45
			Dr. Ahmed Mubarak	
2	P6	Prevalence of Risk Factors Associated with Neonatal Jaundice Among Newborns in Nursery Department of AL-Sabeen Hospital, Sana'a City, Yemen, 2023	Dr. Eman Al-Kuhali	10:45-11:00
			Dr. Fadl Shouga Al- din	
3	P7	Prevalence and Impact of Diphtheria among Children in Al-Sab'een Hospital, Sana'a City, Yemen During 9/2022 – 12/2023	Dr. Asma.A Bady	11:00-11:15
			Dr. Fadl Shouga Al- din	

Breakfast 15 min 11:15 – 11:30

Session

4

Chairmen (Alphabetical order):

- Dr. Fekry Al- naib
- Dr.Nabil Noman
- Dr.Khaled AlJamrah

N	Group	Research Title	supervisor	Time
1	N1	Prevalence of Generalized Anxiety Disorder Among Medical Students in Yemeni Universities - in Sana'a City, Yemen	Dr. Fekri H. AL-Naiab	11:30-11:45
			Dr. Basheer AL-Nabehi	
2	N2	prevalence of depression and anxiety disorders in diabetic patients with insulin therapy	Dr. Abed Shanan	11:45-12:00
			Dr. Ahlam Al-Saidi	
3	N3	Prevalence of Mood Enhancing Substances Usage Among High School Students in Sana'a City	Dr.Amer Al-kharasani	12:00-12:15
			Dr. Muneera Shaher	
4	N4	IMPACT OF FAMILY ILLNESS ON Psychological Status and Academic Performance AMONG Medical Students, 21UMAS, Sana'a city	Dr. Fekry Al-Naeb	12:15-12:30
			Dr. Khaled Al-Jamrah	
5	N5	Evaluation of the Extent and Effect of Psychoeducation and Psychological Support in the Families of Autistic Children at Autistic Centers, Sana'a city, Yemen	Dr. Abed Shannan	12:30-12:45
			Dr. Muneera Shaher	

Scientific Program

3ed day

Session

1

Chairmen (Alphabetical order):

- Dr. Abdo Wadi
- Dr. Ahmed Al-hareb
- Dr. Akram Beshar
- Dr. Bander Ali Ahmed Saleh
- Dr. Muneera Shafer
- Dr. Murad Al- Areeqi
- DR. Sameer Alhakimi
- Dr Sadeq aljabri
- Dr Najat alkhawlanz
- Dr Manal alqasemi
- Dr Ashwaq alfaqeeh
- Dr Asma ALhanhanah

N	Group	Research Title	Supervisor	Time
1	M1	Knowledge, Attitudes and Practices among Physicians about Effectiveness of Probiotics in the Prevention of Antibiotic-Associated Diarrhea in Major Governmental Hospitals in Sana'a City, Yemen, 2023	Dr.Ahmed Al-hareb	8:30-8:45
			Dr: ABDO AHMED SAEED WADI Dr: HORIA AL-SABRI	
2	M2	Prevalence Of Cardiogenic Shock Among Patients With Acute Myocardial Infarction Admitted To Intensive Care Unit At Al-Thawra & Al-Gumhori Hospitals, Sana'a, Yemen)	Dr. Bander Saleh	8:45-9:00
			Dr: HORIA AL-SABRI	
3	M3	Prevalence of Diabetes Mellitus and its Associated Factors Among Chronic Kidney Disease Patients Under Hemodialysis in Sana'a City, Yemen	Dr.Ahmed Al-hareb	9:00-9:15
			Dr. Basheer Alnabehi	
4	M4	Manifestations and Pattern of Acute Coronary Syndrome among Admitted Patients in Cardiac Centers, Sana'a City, Yemen, 2023	Dr. Akram Beshar Dr. Ahlam Al-Saidi	9:15-9:30
5	M5	Prevalence of Hypertension Among Doctors in Alghumhori hospital Sana'a city- Yemen 2023	Dr. MURAD AL- AREEQI Dr. HOREH AL- SABRI	9:30-9:45

Scientific Program

3ed day

Session

2

Chairmen (Alphabetical order):

- Dr.Abdulmalik Qais
- Dr.Omar Nassar.
- Dr.Abdulqadr ALfalahi
- Dr.Ahmed AL hababi
- Dr.Saba'a Amer

N	Group	Research Title	Supervisor	Time
1	R1	Diagnostic Accuracy of Mammography and Ultrasonography For Breast Cancer Correlated with Histopathological Result In Yemeni Women at AL-Amel Oncology Center Sana'a-Yemen 2023	Dr. Bushra AL Sharee	9:45-10:00
			Dr. Basheer Al-Nabehi	
2	R2	The Role of Ultrasonography in Detecting Urinary Tract Calculi Compared to CT Scan in Sana'a City ,Yemen 2023	Dr. Muneer Al-shukri	10:15-10:30
			Dr. Muneera Shaher	
3	R3	Diagnostic Imaging of Duplex Ultrasound Compared to Multi Detector CT Angiography in Patients with Chronic Lower Limb Ischemia	Dr.Enas Al-Hashedi	10:30-10:45
			Dr. Basheer Al-Nabehi	
4	R4	Assessment of Thyroid Nodules among Radiation-Exposed and Non-Exposed Healthcare-workers in Sana'a City	Dr . Ahmed Al-Sayadi	10:45-11:00
			Dr. Muneera Shaher	

Breakfast 15 min 11:00 – 11:15

Session

3

Chairmen (Alphabetical order):

- Dr. Moamar Badi
- Dr. Muneera Shaher
- Dr. Ahlam Alsaidi
- Dr. Khaled ALdar
- Dr. Basheer Al-Nabeh

N	Group	Research Title	Supervisor	Time
1	T1	Mortality Rate among Low-Birth-Weight Infants at Al-Gumhouri Teaching Hospital, Sana'a City, Yemen-2023	Dr. Ahlam Alsaidi	11:15-11:30
2	T2	Knowledge, Attitude and Practice Regarding Cervical Cancer among Women of Reproductive Age in Sana'a City Yemen 2023	Dr. Muneera Shaher	11:30-11:45
			Dr. Basheer Al-Nabehi	
3	T3	Human Rabies Status in Yemen During (2019-2022)	Dr. Muneera Shaher	12:00-12:15
4	T4	Job Satisfaction and Migration Intentions Among Physicians Working at Hospitals in Sana'a, Yemen	Dr. Moamar Mohammed Badi	12:15-12:30



المؤتمر العلمي السادس لجامعة 21 سبتمبر - كلية الطب
الثاني لمناقشة بحوث تخرج طلاب الدفعة الثانية 1446 هـ - 2025 م

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